

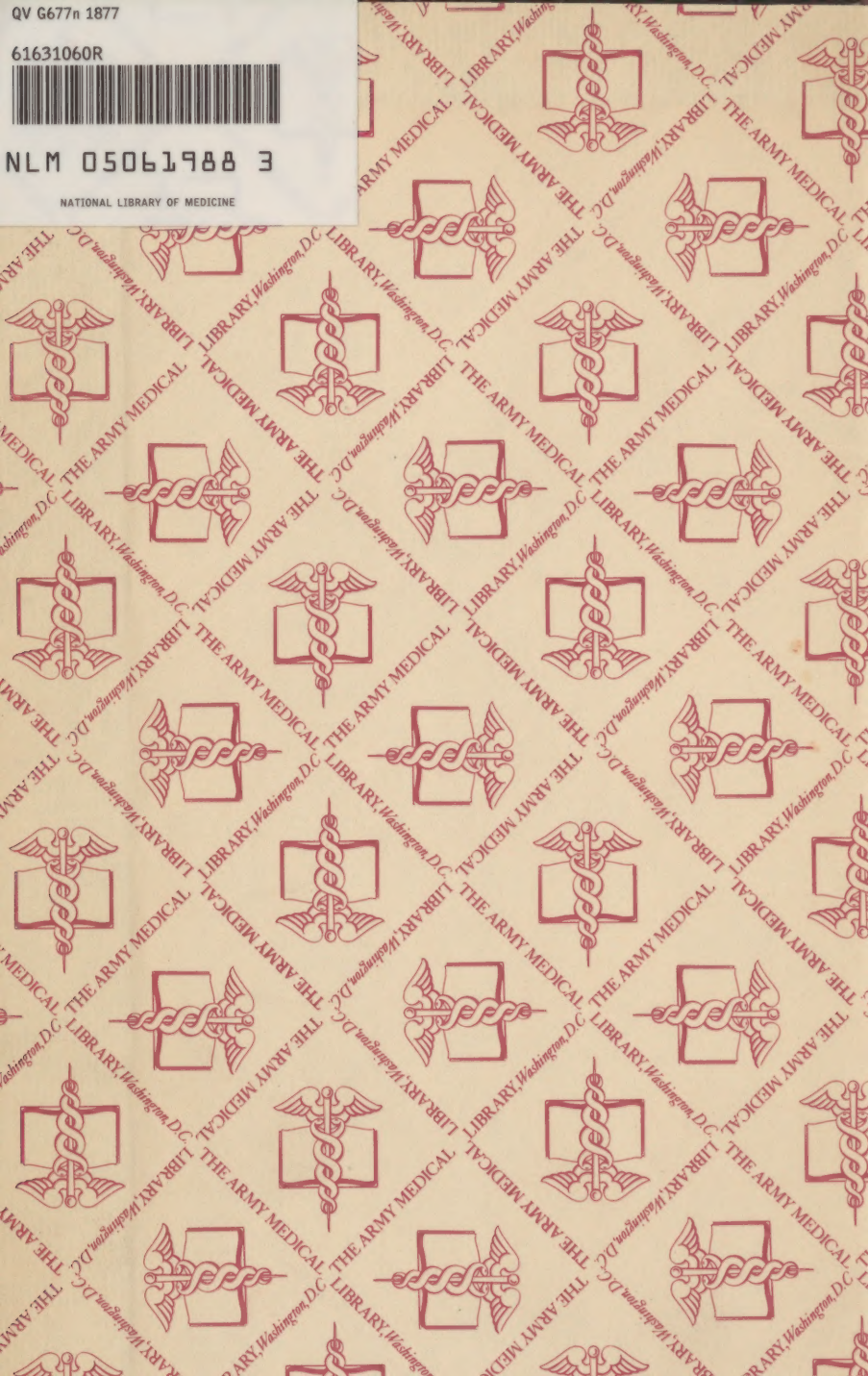
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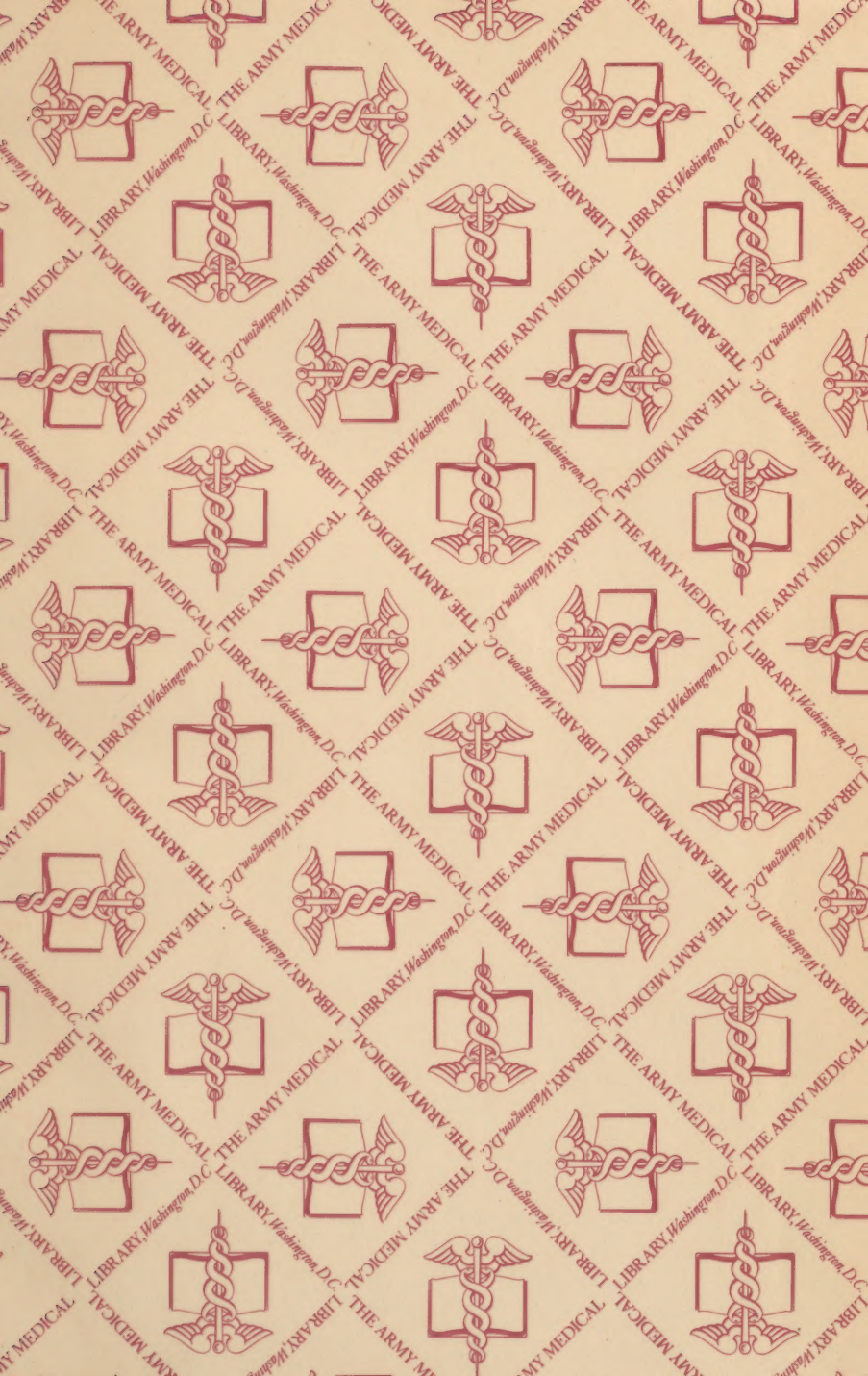
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NEW MEDICINES

247.

—AND—

Their Special Therapeutics.

BY I. J. M. GOSS, A. M., M. D.,

Of Marietta, Ga., author of "Materia-Medica and Therapeutics;"
Lecturer on "Materia-Medica and Therapeutics."



ST. LOUIS:

CHAS. E. WARE & Co., PRINTERS, FIFTH AND CHESTNUT STREETS.

1877.

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1877

DEDICATION.

TO ALL LOVERS

OF THE

HEALING ART

IS THIS WORK RESPECTFULLY DEDICATED BY THE AUTHOR.



APOLOGY FOR THE BREVITY OF THE WORK.

This work is very concise, for which the author is not to blame, as he was limited in space by the publisher ; and as the design was to give the most of the New Remedies (and the more direct action of some of the old ones) a notice, the work necessarily had to be in brief. But if this little essay should meet the approval of the profession, he has a manuscript, embracing the most of the remedies in use, which will follow this ; also, a work on the practice of medicine, to follow that.

THE AUTHOR.

P R E F A C E.

The object of this little essay is to furnish the medical profession with information relative to a class of remedies, mostly indigenous, which have never received their merited attention from the profession in mass; hence, they are called "new." A good many of them have been used by some few physicians, from time to time; others have received some notice in medical journals, but very few of them have been treated of fully, in regular works on *materia-medica*. I have here gleaned the clinical experience and observations that I deemed reliable, from various sources, together with my own personal experience with the remedies treated of in the work. Another object of this work is, to furnish many invaluable remedies that will aid the physician to combat some certain forms or types of disease, not well met by the old and well-known remedies in common use.

We have a vast number of indigenous remedies that are very valuable, yet, they are comparatively unknown to some of our best writers upon *materia-medica*, simply from the fact that they have never tried them. Living in a country abounding in medical plants—as I have done most of my life—I have been careful to investigate their therapeutical value; and by carefully testing the virtues of so many plants, I have found many very valuable remedial agents among them, and now offer to make public the discoveries of myself and others in this direction. Many of the remedies introduced have had but limited trials, as yet; but I have endeavored to so point out the leading affinities of the remedy in each case, as to safely guide the physician in the further investigation into the therapeutical value of it.

It has always been my ambition to enlarge the sphere of success in my benign profession; and to do this, I saw it necessary to increase the number of our remedial agents: to this end, I have

devoted my energies. I have not suffered prejudice or predilection to deter me, but have availed myself of the testimony of empirical experience, in many cases, to guide me in the investigation of some of our indigenous plants. I have ever believed that the All-wise Creator has placed remedies in every clime for the maladies that afflict man in that locality; and in time, this fact will be verified by the discovery of remedies to meet the various complications of diseases in the various localities of civilized countries. And, another reason for writing this little work is, that many physicians requested me to write a work upon "New Medicinies"—and, flattered by the invitation, I have complied with the request; and now send this little volume forth to the harsh criticism of a generous profession, who, I am confident, will approve the motive that prompted the attempt, if they condemn the production. But I am well satisfied that many a toiling practitioner of the healing art, when he has tried some of the remedies treated of in this little essay, will thank me for the additional aid I have furnished him in battling with disease and death.

THE AUTHOR.

NEW MEDICINES

—AND—

THEIR SPECIAL THERAPEUTICS.

OFFICE PHARMACY.

It will be noticed that I have given the dose of many remedies much smaller than is usually advised, but at the same time, I am using a much stronger tincture than has hitherto been made. I make all tinctures as near saturated as I can; then they may be conveniently carried in small space, and they may be depended upon as giving uniform effect. No man can ever succeed in the practice of medicine without reliable remedies, and they must be of uniform strength, so that he may know the dose required in each individual case. To secure these very desirable objects, I have been making my own tinctures for many years, adding 8 ~~drachms~~ of the crushed drug to pint of alcohol; steeping twelve or fourteen days; then percolating off the tincture, and then filtering it through paper. Thus, I have a fine tincture. The old rule of adding one or two ounces of the drug to a pint of alcohol produced a tincture only slightly impregnated with medical principles of the plants used, and the dose necessarily had to be large to have the effect; and if the drug was old, as was often the case, the tincture, of course, was worthless. I find that most of drugs are badly deteriorated by age, and many of them are rendered worthless. I procure foreign drugs, as fresh as I can, and indigenous ones fresh, and tincture them at once, and thus I get reliable medicines. Where the physician cannot thus make his own tinctures, he should get them from a reliable pharmacist, either in the form of tincture or fluid extract. Many of the fluid extracts are reliable agents, and preferable to ordinary tinctures. The saturated or essential tinctures are reliable, when made out of fresh articles, according to the rule above given, and are from one-half to three-fourths the strength of the fluid extracts. The solid extracts are convenient to carry in the pocket-case; and some of them, as podophyllin, leptandrin, hydrastin, cypripedin, scutillarin, and caulophyllin, are reliable; but many of them are worthless. But the manufacture of drugs is too much like many other things now: it is to make money; and the jobber thinks nothing of imposing his old, worthless stock, upon any unsuspecting physician who does not have time to make his own tinctures, or upon such as are too indolent to do so. I used several specimens of the extract and tincture of hyoscyamus, when I first began to practice medicine, and finding no effect from them, I

concluded that it did not have the effect that was attributed to it, and, in consequence, discontinued its use for several years, until I was fortunate enough to get hold of a good article. The first stillingia that I ever used was made from the old, dried root, which, proving inert, as it always does, when old, I was discouraged again, until I tried the tincture of the fresh root, which I found very positive in its action.

ABIES CANADENSIS—HEMLOCK—SPRUCE—(PINUS CANADENSIS MICHAUX).

This is a beautiful forest-tree, found in great abundance in the British provinces of North America, and in most of the New England States. It contains a large per cent. of tannin, and some very valuable tonic-properties. It has not been thoroughly tested.

MEDICAL USES.—The saturated tincture, or fluid-extract of the bark of this tree, has proven valuable as a mild astringent and tonic to the mucous tissues. In chronic-diarrhœa, attended with prostration or debility, it is a valuable remedy; also, in the latter stages of dysentery and cholera-infantum, it proves curative. In hemorrhoids (locally applied), it has proven of much service, especially, alternated with the per-sulphate of iron, every three hours. In vaginal leucorrhœa, with relaxation of the mucous tissue, I have found it a valuable remedy. I use the fluid extract, applied through the speculum, on a bit of lint; renewing it two or three times a day; withdrawing the speculum as soon as the saturated lint is in place. In dyspepsia, from catarrh of the stomach, the abies canadensis has proven to be quite efficient. The symptoms of this form of dyspepsia are: canine hunger, distension of the stomach, and vomiting of much mucous. The dose of the fluid-extract is 30 gtts.; the dose of the saturated-tincture is 60 gtts.

ACALYPHA INDICA—(INDIAN ACALYPHA).

This is an East-Indian plant. There is also an indigenous species in the Southern States, to-wit: The acalypha-virginiana, used by the common people in asthma and croup. Then there are two other species growing in fields, in some parts of the United States; but they have not been investigated.

MEDICAL USES.—The Indian acalypha has proven to be a very valuable remedy in hæmoptysis, even arresting it after all other remedies had failed. It seems to be an astringent to the capillaries of the lungs, of no ordinary powers, possessing the power over these vessels similar to hamamelis and lycopus. It will arrest the hemorrhage in cases of phthisis-pulmonalis, provided

there are not large vessels involved. It also acts very promptly in cases of leucorrhœa, attended with a watery exudation, alternated with a thick, glutinous discharge. It will doubtless prove a good remedy in catarrhal conditions of the mucous-membranes generally. The very prompt action of it in hæmoptysis, is indubitable evidence of its direct power over the capillaries of the lungs, and points it out as a remedy in chronic-bronchitis, attended with profuse expectoration. The dose of the tincture should be small: from 1 to 5 gts., every one or two hours, according to the urgency of the symptoms calling for it.

ÆSCULUS GLABRA—(OHIO BUCKEYE).

This tree grows abundantly in the alluvial lands of Ohio and other States bordering on the Ohio river. It is a large, showy tree, with opposite leaves, pointing outwardly. The leaflets are fine, with a serrate, or toothed edge, and straight veins, resembling the leaf of the chestnut-tree. The flowers are small, and not very showy; stamens carved, much larger than the corolla, which is of a pale-yellow color, and consists of four upright petals. The fruit is prickly, when young, and contains the most active properties; but the rind of the fruit, the bark and leaves, possess toxical powers in large doses. A tincture of the bark and fruit is used in medicine, made by maceration in dilute-alcohol.

SPHERE OF ACTION.—Acts as an irritant to the cerebro-spinal system; affects the intestinal canal—especially the rectum, and probably the liver.

MEDICAL USES.—Its specific tendency to the rectum renders it truly invaluable in some diseases of that part, especially in constipation and hemorrhoids, with vertigo. When the pile-tumors are external, and of a dark-purple color, showing congestion of the parts, this article will always prove of material aid in the removal of the humors, if they are not too large to be removed by medication. It may be given in doses of from 5 drops of the tincture, three or four times a day, or the fluid extract in three-drop doses.

ÆSCULUS HIPPOCASTANUM—(HORSE-CHESTNUT.)

This is another species of the æsculus family, which is a beautiful and lofty tree, with numerous, spreading branches, covered with a rough, brownish-bark. The leaves are large, on long foot-stalks, and composed of some seven leaflets, arising from a common centre, the middle one being the loftiest; they are of a spatulate form, serrate, acuminate, much varied, and of a bright-green color. The flowers are in thyoid racemes or panicles, and at the

extremity of the branches. The calyx is of a pale-green color, five-toothed and spreading. The corolla is formed of five petals, which are irregular, unequal, spreading, inserted into the calyx by narrow claws, waved at the edges, and of a white color, marked below with a yellowish-red spot. The stamens are seven, with awl-shaped filaments, supporting reddish, oblong, double anthers. The ovary is roundish, and furnished with a short style and pointed stigma. The fruit is prickly, coriaceous, roundish, three-celled, and usually containing two seeds, which have a brown, shining testa, and a large, paler hilum. It is a native of Northern Asia, but has been cultivated in most parts of Europe. It flowers in May.

MEDICAL USES.—The *æsculus hippocastanum*, like the *æsculus glabra*, acts directly upon the spinal cord, mucous-membrane of the alimentary canal, especially upon the rectum; also upon the portal system. Hence, it is a valuable remedy for constipation, and soreness of the rectum, feeling like the folds of the mucous-membrane obstructed the rectum. In hemorrhoids of a painful character, where the tumors are of a purple color, and smart and burn, this will be found a very valuable remedy; and it may be given internally in doses of 5 or 10 gts. every three hours, and an ointment of it may be applied to the tumors. It is a valuable remedy for chronic-laryngeal coughs, dependent upon hepatic congestion. It is a very prompt remedy in leucorrhœa when associated with hemorrhoids; also for uterine congestions, attended with soreness and throbbing pains in the hypogastrium. It will relieve many abnormal conditions of the system having their origin in the liver and portal system. It is not as poisonous as the *æsculus glabra*, for the nut is fed to animals in Europe. The medical powers reside in the nut, rind of the nut, and the bark of the tree and its root. In all cases of hemorrhoids, either internal or external, where the tumors are hard, protruding, purple and very sore, with aching, burning sensation, this remedy will give prompt relief, and frequently effect a cure, where the tumors are not too large to be dispersed. I use the saturated tincture in doses varying from 5 to 10 grains, three times a day. The ointment may be made by adding to the tincture 1 ounce to 1 drachm of cocoa butter; apply three times a day.

AGAVE AMERICANA—CENTURY-PLANT.

The agave is a large evergreen plant, that blooms so seldom that it is called the century-plant, under the idea that it only blooms once in a century. It flourishes in the warmer latitudes of South America, where its juice is expressed by the natives and allowed to ferment. When it thus ferments, it is called *pulque*, and is used as an exhilarating beverage.

It is very plentiful in Honduras, where it is much used by the natives, as I am told by Mr. George Allison, of Lebanon, Tennessee, who has just returned from a three-years' stay in Honduras. He tells me that they wound the plant and suffer the juice to escape and lodge around a natural cup-like collar around the base of the plant; they collect it in skin bottles, and bury them from forty to sixty days, and then exhume them; and the fermentation has been thus completed, it is then used as a beverage.

MEDICAL USES—Those who have used the extract and infusion of this plant report it as very valuable in scurvy. One writer says that the South American women use the fresh juice to promote menstruation. It is represented by one writer as a good alternative in syphilis. Dr. Penn, of the United States army, speaks very highly of it in scurvy; he thinks it is superior to lime-juice. He used the expressed-juice in doses of 1 to 2 ounces—or as much as 2 or 3 drachms daily.

ACONITE—ACONITUM NAPELLUS—(MONK'S-HOOD.

This is a native of most parts of Europe, growing upon wooded hills and plains. All parts of the plant contain powerfully poisonous properties; but the root is the part most generally employed for medical uses.

The root is simple or fusiform, woody. The stem is erect and simple. The leaves are palmate, deeply cleft, and alternate. The flowers are of a dark-blue color, in a terminal raceme; pedicles, short. The petaloid sepals are fine; the upper being helmet-shaped and concealing the petals; the lateral ones, broad, rounded; the lower, oblong and deflexed. The stamens are filiform, converging, with whitish anthers. The ovaries are from three to five, with simple, reflected stigmas. The capsules contain many wrinkled, angular seeds.

MEDICAL USES.—This plant was introduced to the medical profession by Storck, as a remedy in chronic-rheumatism. Its medical powers depend upon aconitia, or aconitin. Although this article, in over-doses, is an acro-narcotic poison, yet, in the hands of the skillful physician, it is one of our best remedial agents. It is both sedative and anodyne; and upon these properties combined, it is one of the most reliable remedies in certain forms of febrile and inflammatory diseases. It differs in its action from *veratrum viride*. It is indicated in asthenia, attended with an increase of nervous and vascular action. In the sthenic forms of fevers and inflammations, this article is not equal to *veratrum*; but in those cases of fevers and inflammations occurring in feeble constitutions, partaking of the characteristics of a typhoid grade, indicated by quick, small, feeble, and rather threaded pulse exhibiting depression of the sympathetic system of nerves

especially the ganglia of the heart, then aconite is the remedy indicated, and will always manifest its curative power. It has a peculiarly calmative effect upon the nervous system, especially upon that of the ganglionic system; and to this power are we to attribute its good effects in many diseases connected with, or originating from, morbid conditions of that part of the nervous system. In zymotic diseases, where the ganglionic system is directly affected, we see the direct good effects of this remedy exerted.

We often meet with cases of disease, where this morbid impression upon the great sympathetic system is manifested in depression of the heart's action; in which cases, we observe the characteristic feeble pulse, showing a want of power in the heart to propel the blood along the capillaries, which causes coldness of the extremities, and great torpor of the whole vegetative system. Here small doses of aconite, repeated every hour or two, will tone up the heart, and act upon the capillaries, so as to relieve the obstructed circulation, and give free flow of blood to every part of the system. Aconite acts quite differently upon the heart in small doses from what it does in toxic doses. I use it in all fevers and inflammations, where asthenia is connected with the disease; and I find that it does not disappoint my expectations. Locally applied, it is a very valuable æsthetic; and is applicable in many cases where there is hypæsthesia. I use the fluid-extract, or saturated-tincture. The dose of the fluid-extract is $\frac{1}{4}$ to 1 gtt. The dose of the saturated-tincture of the root, is $\frac{1}{2}$ to 2 gtt. It need not be repeated in full doses oftener than every two or three hours.

AILANTUS GLANDULOSA—(TREE OF PARADISE.)

Ailantus belongs to the natural system xanthoxycocæ; and according to the linnæan system, it belongs to the order, monœica-polygamia. It grows to the height of sixty or seventy feet. The leaves are from one-and-a-half to six feet in length, pinnated, with an odd one, and having leaflets with coarse glandulous teeth near the base. The flowers appear in June and July, and emit a very unpleasant odor, occurring in large, compact panicles, of a whitish-green color. The fruit resembles that of the ash.

MEDICAL PROPERTIES—In over-doses, it produces vomiting, a staggering and tottering gait, giddiness, slight headache, a sense of intoxication in the brain, soreness of the eyes, a miliary-rash about the face, and sometimes, over the body, livid-redness and swelling of the tonsils, purging, with a burning sensation in the stomach and bowels. It is much used by the Chinese in dysentery. Dr. Robert, a French surgeon, reports very favorably of its use in dysentery. He used the tincture of the dried roots and bark, in small doses, and found it superior to mercurials or ipecac in this disease. It is also highly praised, by another writer, in epilepsy.

I tried it in that disease ; but did not have the opportunity to test it fairly. It is also spoken of as a remedy in asthma ; but I have not used it in that disease. The dose of the saturated-tincture is from 20 to 60 gtts., every four hours.

ARALIA RACEMOSA—SPIKENARD.

This is a large, spreading, shrubby plant, with leaflets, heart-ovate-pointed, double, serrate, slightly downy. Umbels, racemose, paniced, styles united below. The roots are long, large, and of a spicy, aromatic taste. The flowers are in umbels, and of a greenish-white color, and has a berry-like stone fruit.

MEDICAL PROPERTIES.—This is another old remedy that has never received due attention from the profession. It has generally been used in the dry state, in which state it is almost inert. If procured fresh, and tinctured while green, it will be found an active remedy for several pathological conditions named below. The Indians used it, and held it in high repute—Michaux. The common people have long used it in chronic coughs with the most decided results, so much so that they still use it where it grows. It has many valuable properties, but its more direct affinity is for the pulmonary organs. It is a valuable remedy for the harassing cough that attends hay-fever and chronic laryngitis. It is also a remedy for humid asthma ; and, combined with ptelia, or the silphium laciniatum, it will cure many cases of that disease. For asthma and hay-fever, it may be used in doses of 10 drops every two or three hours. I use the saturated tincture of the fresh root. In 30-drop doses, it has cured leucorrhœa promptly ; and is a valuable remedy for the vaginal form of leucorrhœa.

ARNICA MONTANA—LEPARDS BANE.

Arnica montana is a native of the northern parts of Europe and Asia, growing in moist, shady situations, and flowering in June and July. The flowers are the parts used. They are of a deep-yellow color, somewhat tinged with brown before they are dried. For plate and botanical description, see the Author's "New Materia-Medica and Therapeutics."

MEDICAL USES.—*Arnica* is a stimulant to the whole system. When taken in sufficient doses, it quickens the heart's action very sensibly, and also hastens respiratory movement, and promotes the action of the sudorific glands and the kidneys. At the same time, it exerts a marked influence over the nervous system, causing headache, giddiness and sleeplessness. It may be used, in moderate doses, say 2 to 3 drops, in cases of great prostration, as in the last stages of typhus

and typhoid fevers; in the collapse of any other disease that may require a stimulant. But its external application is its chief use in this country. Used as a lotion to wounds, bruises, sprains and strains, it is one of our best remedies. For which purpose the saturated tincture may be diluted with seven or eight parts of water to one of the tincture, and applied with compresses of cloth or lint. It has the peculiar power to so stimulate the capillary vessels as to overcome the stasis of the circulation, and thus prevent or overcome the congestion, and thereby to relieve the inflammation in a part. It is one of those trustworthy remedies upon which we may always rely with the utmost confidence. The dose is 5 to 6 drops.

ALETRIS FARINOSA—BLAZING STAR—AGUE ROOT, STAR ROOT, Etc.

This plant is confounded with the *helonias dioica*, which resembles the *aletris* (see the author's "New and General Materia-Medica" for plates of both), but is quite different. The *aletris* has some ten or twelve radical leaves spreading on the ground like a star, sessile, lanceolate, entire, smooth, ribbed, and of a pale-green color. The root is small, perennial, and contorted. The stem is from one to two feet high, simple, erect, and invested with remote scales, which sometimes expand into small subulate leaves. The flowers are on a slender spike, scattered, each flower having a short pedicle, and are in a minute bract, and are white outside and mealy.

MEDICAL PROPERTIES.—This is strictly a female remedy. It has a special affinity for the reproductive organs of the female, and is, in the true sense, a *uterine tonic*. It is a favorite remedy with me in many female diseases of an anæmic or chlorotic type. In uterine atony, with suspension of the menses, or in sterility, I have found the *aletris* act with great certainty. In scanty, pale menses, where there is general debility, emaciation and impoverished blood, it always acts well. In prolapsus uteri, anteor retroversion, depending upon general debility, as it often does, this remedy will often effect a cure, if given for a considerable time. It also aids to prevent abortion. The dose is 30 to 60 drops of the tincture, or 20 to 30 of the fluid extract, three times a day.

ALNUS RUBRA—TAG ALDER.

This is an indigenous shrub, growing in swamps, and near streams in many parts of the United States. It grows from ten to twenty feet high. Its bloom is a reddish-green tag. The bark is the part used.

MEDICAL USES.—This is an antipsoric of very decided powers. It not only possesses catalytic powers, but very positive tonic

properties. And to these two properties combined it owes its very efficient influence in curing scrofula and skin diseases. I have used it very frequently in scrofulous skin diseases with the most positive results. For scrofula, it may be combined with scrophularia, rumex-crispus and corydalis, and alternated with some of the iodides, either the iodide of ammonia or the iodide of barium. The alnus rubra is a very prompt remedy in several forms of skin disease, as impetigo, prurigo, herpes, etc. In cases where the lymphatic system is diseased, this remedy, combined with menespermum, will exert a very positive curative effect. With this combination, I have frequently cured cases of diseases of children connected with torpidity of the lymphatic system. I have recently cured several very grave cases of scrofula with the alnus, combined with the scrophularia, menespermum, corydalis, alternated with the iodides. The dose of the tincture is from 1 to 2 ounces.

AMPELOPSIS QUINQUEFOLIA—WILD GRAPE—VIRGINIA CREEPER—AMERICAN JOY.

The ampelopsis quinquefolia is a climbing vine, with five leaflets to the foot-stalk, with dented edges, smooth; turning of a crimson color in autumn. The flowers are greenish, or white, in clusters, regularly divided by pairs; the calyx is entire, petals five, distinct, spreading; ovary, two-celled; cells, two-valved; style, very short; the berries are of a dark-blue color, acid; smaller than the common grape; two-celled; cells, one to two-seeded. It grows abundantly in many parts of the United States, climbing trees, fences and walls, and by means of its radicating tendrils, it supports itself firmly, ascending trees frequently to the height of fifty feet. It blooms in July, and ripens its fruit in October.

MEDICAL EFFECTS.—This is an active antipsoric, having a direct affinity for the skin, mucous membranes, glandular apparatus and cellular tissue. In enlargement of the lymphatics, we have in the ampelopsis a very positive remedy. In scrofula, the lymphatics are often inflamed, giving rise to local determinations of this disease, which result in extensive ulcerations and decomposition. Here the specific influence of ampelopsis upon the lymphatics point to it at once as the remedy. The ampelopsis gives tone and energy to these vessels, thereby overcoming the obstruction, and relieving the inflammation. In leucocythæmia, which is a blood disease, dependent upon an unhealthy condition of the lymphatic system, here the ampelopsis will display its curative powers in a remarkable manner. In this diseased condition of the lymphatic system, it increases the tone of these vessels, and so augments the nutritive functions as to restore the blood again to a healthy condition. In squæna, or scale disease of the skin, ampelopsis has a very fine effect, and may be alternated with the bromide of arsenic, and combined with other antipsorics. I have also

discovered that ampelopsis very materially increases the action of the kidneys, and thereby aids in the cure of dropsy; in fact, I have tried the remedy alone in one case of dropsy, in which it was sufficient to remove the disease in a few weeks. I have often combined it with the apocynum cannabinum in cases of dropsy, and thereby cured the dropsy with a promptness not hitherto accomplished by other remedies. I was consulted by a gentleman near this place, last summer, for his wife, who was at about the sixth month of gestation. I found her with great dyspnoea, chest filled with water to such an extent that she could not lay down to sleep. I put her upon a tea of the ampelopsis, to be taken freely, together with tincture of the apocynum cannabinum, and she was soon relieved. I use the saturated tincture of the leaves and bark, in doses of 1 or 2 drachms every three hours.

AMYL NITRITE—NITRITE OF AMYL.

Balard, a French chemist, discovered this drug in the year 1844; and Dr. Guthrie called attention to it in 1859; but it was not much noticed by the profession until 1865, when Dr. Richardson introduced it to notice. It is an oily, very volatile liquid of a yellowish color, with a persistent, penetrating odor, very highly inflammable, and lighter than water, boiling at 180° F. It is prepared by gently heating amylic alcohol (fusil oil) in a retort, with nitric acid, removing the heat as soon as bubbles form, repressing the effervescence, if too strong, by cold water, rectifying with potassa, the distillate passing over under 212° F., and collecting apart the product which distills under 170° F. It is used by inhalation mostly, but acts when injected subcutaneously, or swallowed, in some thirty or forty seconds. Its effects are first manifested by flushing of the face, and perspiration about the head, face and neck. It is more valuable than ether or chloroform in cases of internal spasms with pains, such as angina pectoris, asthma or in epilepsy. Prof. H. C. Wood says that it is a powerful depressant of the motor centers of the spinal cord, but that it is in no sense an anæsthetic. And it seems to relieve agina pectoris simply as an anti-spasmodic, just as it relieves asthma and epilepsy. There are several cases reported cured recently of asthma by inhalations of 10 or 15 drops three times a day. It should be used cautiously.

APOCYNUM ANDROSEMIFOLIUM—BITTER ROOT—DOGS'-BANE.

This plant is indigenous, with a perennial root, of an intensely bitter taste. It grows from three to six feet high, containing a milky juice like the *A. Cannabinum*. The stem is smooth and simple below, but branched above, usually red on the side exposed

to the sun, and covered with a tough, fibrous bark. It grows along fences, skirts of woods, and near streams, almost all over the United States. It flowers in June and July. The flowers are white, tinged with red, and grow on loose, nodding, terminal or axillary bunches. The peduncles are furnished with small, acute bracts. The tube of the corolla is larger than the calyx, and has a spreading border. The fruit consists of a pair of long, linear, acute follicles, containing numerous imbricated seeds, furnished with a silky down, resembling that of the *A. Cannabinum*; but its flowers are much larger, and always drooping.

MEDICAL PROPERTIES.—This is an active anti-arthritis, having direct affinity for muscular tissue. It has often cured acute rheumatism in a few days, without the aid of any other remedy. I have found it valuable for nervous headache, and for rheumatic headache; also for expulsion of the ascarides; I have found it a valuable remedy in constipation, given in pills. The dose of the powdered root is 3 or 4 grains. Dose of the tincture 10 to 20 gtt.

APOCYNUM CANNABINUM—INDIAN HEMP.

In my "General Materia-Medica," I have given the properties of this plant fully. It has a fine effect upon the capillary circulation, acting as a tonic and stimulant to that part of the circulation. I have used the powdered root in pills, with success, in headache, from atony of the capillary circulation. In typhomania, where, from retained zymotic poison, the brain is congested, this article acts promptly in relieving the difficulty. It is probable that the *apocynum androsaemifolium* possesses the same properties. I have used both; but I am not positive of their precise identity of action. In that atonic condition of the blood-vessels that favors the exudation of serum, leading to dropsy, there is no remedy more positive in action than this one. I have been using it for several years, usually alternated with fox glove, or other active diuretics, and have cured many grave cases of dropsy, and many of them after other ordinary remedies failed to relieve at all. In rheumatism, where there is œdema, *apocynum* has proved valuable in my hands. In leucorrhœa, associated with œdema, or a puffy condition of the flesh, this is a good remedy. The dose of the fluid extract is from 2 to 5 drops; the dose of the saturated tincture is from 5 to 15 drops, every three hours.

APOMORPHIN.

This alkaloid of opium, discovered by Dr. Mathieson, is a snow-white powder while kept dry, but turns green when moist. It differs from morphia in having one atom of water less than morphia. It may be formed by treating morphia under pressure

with strong hydro-chloric acid. Chemically expressed, its composition is $C. H. NO. HC.$

MEDICAL USES.—In large doses, of one-fifth or one-third of a grain, it is a very complete and efficient emetic, and may be resorted to in cases of poisoning, when the object is to evacuate the stomach as quick as possible. Yet in great nausea and vomiting from disease of the brain, very small doses have been known to relieve, after other anti-emetics had failed. It has been found very prompt to relieve the vomiting caused by pressure of a tumor upon the brain. Thus it is plain that remedies act very differently under different pathological conditions; and it is noteworthy that remedies vary in action, according to the dose. This article is found to produce nausea and vomiting in large doses; yet, in very small doses, like ipecac, it seems, by its peripheral effects, to have just the opposite effects from its central action in large doses; and it is so of many other drugs, as of aconite, ipecac, rhubarb, lobelia, and many others. They doubtless have a primary and a secondary action.

ANAGALLIS ARVENSIS—RED CHICKWEED.

Anagallis has been much praised as a remedy in hydrophobia, mania, epilepsy and delirium, which shows that it has a direct effect upon the brain. It has not been satisfactorily tested; but it doubtless is worthy of further investigation. The fluid extract may be used in doses of one to five drops; the saturated tincture made by adding 8 ounces to alcohol (60°) 1 O. Dose—5 to 15 drops, repeated every two hours.

ANEMONE PULSATILLA—WIND FLOWER.

This plant is common in Europe; and one species, the anemone ptoleus, grows in Europe and North America, and is said to be analogous in its properties to the pulsatilla. It is a delicate plant, with a creeping root; simple, erect stem, six to ten inches high, bearing a single flower; leaves, ternate; sepals, four to six; stamens and ovaries numerous. It is much used by many physicians in various diseases.

MEDICAL USES.—It has been used with success in some skin diseases, as tetter, scald-head, ulcers, syphilitic nodes, cataract, and opacity of the cornea. It also is valuable in spermatorrhœa, as it has a direct effect upon the brain and spinal cord. It is also a good emmenagogue, in cases occurring from atony or debility. The saturated tincture, made by adding 8 ounces to alcohol (76°) O. 1. Dose—2 to 5 drops every four hours. Fluid extract dose—1 to 3 drops.

ARSENICA IODI: IODIDE OF ARSENIC—(ARSENICI IODINUM.)

The iodide of arsenic is formed by adding a mixture of one part of finely-pulverized metallic arsenic, and five parts of iodine, in a tubulated retort, gently heating until united; then the iodide is to be resublimated, to separate any excess of arsenic. It is an orange-red, volatile solid, which readily melts in water, and is volatilized by heat.

MEDICAL USES.—This is a favorite iodide with me. There is no preparation of iodine more positive in its action than this one, when prescribed according to its indications. It is indicated in all ulcerative diseases in which there are corrosive, irritating discharges, and in mucous diseases, where the discharges are inclined to irritate the parts over which they pass. I have just cured two very obstinate old cases of ozena, of several years' standing, in which the above irritative discharge was one of the prominent symptoms, with the iodide of arsenic internally, and the permanganate of potash as a wash. In all mucous diseases, where the mucous-membrane is red, angry, and swollen, this iodide will always aid in curing the disease. In catarrh, if attended with alternate chills and heat, and the discharge from the nose is hot and scalding, the iodide of arsenic will arrest it in a few hours or days. When the discharge is thin and watery, and profuse, but not corrosive and irritating, then gelsemium may be alternated with the iodide. In epidemic-influenza, whether simple catarrhal-fever ("a bad cold, so-called"), or the more grave form, called "the epizootic," which attacked both men and animals, the iodide of arsenic is one of our most trustworthy remedies. It is a specific in *catarrhus æstivus*, or hay-fever, to which many persons are very subject every summer and fall. In old nasal-catarrhs, where there are scabs in the nose, and the discharges become bloody, or fœtid with pus, the iodide of arsenic will always prove a curative remedy; and it may be alternated with douches of permanganate of potash, from $\frac{1}{2}$ to 2 grains to the ounce of water, or 5 or 6 grains of a mixture of borate of soda and tris-nitrate of bismuth, made by adding 2 ounces of the bismuth to 4 ounces of the borate of soda, and mixing well in a mortar; of this, 5 or 6 grains, melted in an ounce or two of water, and passed through the nasal-duct, with a good douche, will aid the cure. In chronic-scorfulous-ophthalmia, with ulceration, it is also a very positive remedy. In otorrhœa, with fœtid, corrosive discharge, it may be given with much benefit. In leucorrhœa, with a corrosive discharge, accompanied with too frequent and profuse menses, I have found it a good remedy. In the malignant form of diphtheria, scarlet-fever, and small-pox, it will be found one of our most reliable remedies, arresting the malignant process at once, and thereby disarming the disease of its danger. In aphonia, when occurring in scorfulous persons, the iodide of arsenic is a positive remedy. In many obstinate

eruptions on the skin, attended with a burning and itching, such as lepra, impetigo, psoriasis, tinea, furfuraceous-pityriasis. and moist-tetter, it acts much better than arsenic alone. In old, irritable ulcers, with corrosive, sanious discharge, and burning pains, it may be given with the utmost confidence. I have used it a great deal in old, obstinate ulcers, attended with a corrosive, irritating discharge, and have found it more prompt in its action than iodine or arsenic alone. I use it in many cases of scrofulous skin-diseases, where I used to use iodine; but I have found the iodide of arsenic much more positive in its action than iodine alone. I use the solution in water or alcohol, 1 or 2 grains to the ounce; the dose is a few drops. I usually triturate 1 grain to 9 of sugar of milk, and give from $\frac{1}{4}$ to 1 grain, three times a day, in water. Generally, $\frac{1}{4}$ of a grain of the triturate article is a dose.

ASPARAGIN.

Asparagin is the active principle of asparagus—*officinalis*. Asparagin is prepared from the fresh shoots of asparagus by the process of dialysis. This article has lately come into notice; and as yet, has not been much used, but is beginning to be used in hypertrophy of the heart, and as a sedative to the heart in other diseases.

It is highly praised by some writers, combined with caffeine, in nervous headache, from congestion of the brain. In hypertrophy of the heart it may be combined with bromide of potassa, or collinsonia, in doses to suit each individual constitution. It is also a mild and efficient diuretic, and may be combined with other diuretics, with good effect. In dropsy, dependent upon, or connected with disease of the heart, it may be combined with digitalis with good effect. In the lithic-acid diathesis, in gout and rheumatism, it may be combined with acetate of potassa with the happiest effect. In doses of from one to five grains, it has a quieting influence over the functions of the brain and spinal-cord. In all affections connected with an irritable condition of the nervous system, depending upon determination to the brain and spinal-cord, this is an efficient remedy. It also acts as a depurant of the blood; stimulating the kidneys and serous-tissues of the bowels to throw off the effete materials. Its usual dose is from 1 to 3 grains, and may be given every two hours; and it may be increased to 5 grains, four times a day.

AGRIMONIA EUPATORIA—STICKWORT—(AGRIMONY.)

This plant has a reddish, tapering root with brown stems, covered with soft, silky hairs, growing from two to three feet high; leaves alternate, sessile, interruptedly pinnate. The flowers are yellow, small, but numerous, one above another in long spikes;

after which, form rough, hanging heads, which stick to whatever may chance to touch them. It has a perennial root; and is found in Asia, Europe, Canada and the United States, growing by roadsides, woods and in fields; flowering in July and August.

MEDICAL PROPERTIES.—This valuable little plant has been hitherto mostly neglected by the profession, but used with success by the people. Its sphere of action is upon the glandular apparatus, skin and mucous-membranes. It possesses some astringency, together with a peculiarly soothing influence over mucous surfaces, which render it valuable in nephritic and other urinary diseases. It is frequently used with good effect in bronchial irritations; also in calculous affections. As a glandular remedy, it may be used with marked effect in scrofulous affections. Continued for a length of time, it has frequently cured scrofula without any other remedy. It may be used in the form of a tincture, infusion, or syrup. The dose of the saturated-tincture is from 1 to 2 drachms. The dose of the fluid extract is from $\frac{1}{2}$ to 1 drachm.

(ARCTIUM LAPPA—BURDOCK—ARCTIUM MAJOR.)

There are two species of arctium, to-wit: *Arctium major*, having large leaves, and the *arctium minor*, which has smaller leaves. The *arctium major* is the one used. This is an old remedy, yet has never been duly appreciated by the profession, and that is why I place it with new remedies. It is too well known to require description.

MEDICAL USES.—Like all other alteratives, it fills a place not so well filled by other articles of its class. I have just spoken of the very positive effects of iodide of arsenic in that class of scrofulous taints characterized by moist, suppurative inflammation, with a tendency to decomposition. And here I introduce this very common, old, but neglected remedy, to fill a positive place in the treatment of that class of skin diseases characterized by the accumulation of dry crusts, or scales upon the surface. In *tinea capitis*, *crusta lactea*, dry eczema, chronic erysipelas, boils on the face and eyelids, styes, and chronic inflammation of the eyelids, from a strumous diathesis, this remedy displays astonishing powers. This class of diseases has always been peculiarly obstinate to cure; but the use of the above remedy will cure most of them if used for a considerable time. It may be used in the form of fluid-extract, infusion, syrup, or saturated tincture. The dose of the fluid-extract, $\frac{1}{2}$ to 1 ounce; of the tincture, 1 to 2 ounces, three times a day.

ASCLEPIAS SYRIACA—SILK WEED.

This is the *asclepias corunti* of Gray, and the *asclepias syriaca* of Linnæus; known by the name of milkweed by the common people. It has a rather large, stout stem, simple, somewhat branched at the top, growing from two to four feet high.

The leaves are egg-shaped, elliptical, spreading, opposite, with short foot-stalk or stem, gradually acute, and downy underneath. The flowers are in umbels, several, axillary, nodding, dense, round; each has twenty or thirty flowers. The calyx segments, lance-shaped; corolla, greenish-purple, reflexed, leaving the corona, which is of nearly the same color. Only a few of the flowers prove fertile, which produce oblong-pointed pods, covered with sharp prickles, which contain a mass of long silky fibres with the seeds attached. It is indigenous to the United States, growing in rich soil, in uncultivated fields; flowering from June to September. When wounded, it emits a milky juice. An extract is now made from it called *asclepiane*.

MEDICAL USES.—One of its favorite uses is in dropsies of a renal origin. It, like *colchicum* and *cimicifuga*, very materially increases the solids of the urine, and hence is a valuable remedy in rheumatism. It is also a prompt remedy in nervous headache from renal obstruction, causing urenic poisoning. It is also a remedy in scarlatinal dropsy. The dose of the saturated tincture, 1 drachm three or four times a day; the fluid-extract dose, $\frac{1}{4}$ to $\frac{1}{2}$ drachm.

BAPTISIA TINCTORIA—WILD INDIGO.

This is an indigenous plant, growing in many parts of the United States, in dry, sandy and poor soils, in woods and on hills. It blooms in July and August, having bright-yellow flowers, arranged in small, loose clusters at the ends of branches. The fruit is an oblong pod of a bluish-black color. It contains indigo, tannin, an acid, and baptisin. There are twelve other species besides this one, which mostly grow in the Western States, on prairies, etc.

MEDICAL PROPERTIES.—This is an indispensable agent in the treatment of adynamic fevers and inflammations and kindred affections. It covers many grave and important morbid conditions of the system, although its range of action is not as wide as some other remedies. It acts directly in the blood and upon the nervous system in a peculiar way; also exerts an influence upon the mucous surface. It is used with good effect in typhoid and typhus fevers, where there is a septic tendency. And it may be used very successfully in the forming stage of adynamic fevers, where there is always a septic condition of the fluids. There is strong testimony that it possesses abortive power over this form of fevers, if given in the incipency of the attack. Ten or fifteen drops of the saturated tincture of the fresh root, given every two hours, will frequently arrest the diseases above named in their inception. And it is not only indicated in typhoid fever, but in all conditions of a like character, occurring in the course of any

disease. We have this septic tendency in cases of malignant scarlatina, small-pox, pneumonia, dysentery, and sometimes in the later stages of remittent fever; and very often in puerperal fever, in which baptisia is directly indicated, and will act promptly. In the typhoid variety of cerebro-spinal-meningitis, where the blood rapidly tends to disorganization, it is one of our most positive remedies. In diphtheria, where there is a putrid odor to the breath and the discharges, with dark red or ulcerated mucous membranes, or the exudation of the characteristic albuminous formation upon the uvula, tonsils and mouth, then baptisia will prove very efficient. I was called recently to two children in one family, aged about three and five years. In both cases there was deep redness of the tonsils, uvula and palatine arch; and in one of them a heavy coating of the albuminous exudation upon the tonsils and uvula, with very offensive odor to all the discharges. I gave the baptisia in doses of four or five drops every two hours, and in twelve hours there was a decided change for the better in both cases; the exudation disappeared, the membranes assumed their natural aspect, and in three days they were out of danger, and soon convalesced. In leucorrhœa, where the discharge is very offensive, an injection of a strong tea of baptisia will soon correct this septic condition. Where there is large ulcers on the body or limbs, with an offensive odor, the baptisia, locally applied, will be of material aid in correcting this condition, and may be given also internally, in alternation with the iodide of arsenic. Its topical effects are much like carbolic acid, chlorate of potash, salicylic acid, or the permanganate of potash. In all cases where there is a great tendency to retrograde metamorphosis, the baptisia is the remedy indicated. It will frequently arrest gangrene in a wound, and I think always prevent it, if given as soon as any tendency to it is manifested in the system. For several years I have been in the habit of using the tincture, in small doses, in all cases of threatened gangrene, and have succeeded in preventing it. In cases of confinement of females, where the lochial discharge is offensive, a wash of the infusion, or a dilution of the tincture, thrown up the vagina, will arrest this tendency, especially if small doses are given internally. The dose of the saturated tincture of the fresh root, is from 10 to 20 drops every three hours; the dose of the fluid-extract, is from 10 to 15 drops every three hours.

BARBERRY—BERBERIS VULGARIS—FLUID-EXTRACT AND TINCTURE.

The berberis vulgaris is a very active tonic, possessing the properties of calumba, chelone glabra, hydrastis canadensis, and many other bitter tonics. I have used it in my own person with very prompt relief of indigestion. It also has considerable influence over the liver, and has been often used with prompt

success in jaundice. It has not received its merited attention. I was induced to try it in dyspepsia, in my own person, by having witnessed a very remarkable cure of a young man, after the various other tonics had failed, and with berberis and columba he was cured in a few months. I also witnessed a very speedy cure of jaundice and dyspepsia in a lady friend by this remedy alone. Her husband had tried several noted physicians, all of whom failed to cure her. He then procured the berberis vulgaris, and made a common bitters, by adding it to whisky, of which she drank in doses of $\frac{1}{2}$ to 1 ounce, three times a day, which restored her to health. Witnessing thus the powers of this almost neglected plant, I procured it, and made a saturated tincture, and used it in doses of one drachm, three times a day, which improved my digestion very soon. I am now using it with like good effect in many cases. The fluid-extract, properly prepared, would have the same effect as the tincture. The dose would be from 30 to 60 drops, three times a day.

CHELONE GLABRA.—BALMONY.

The chelone-glabra is a perennial, with an upright, branching stem, and large rose-colored or white or sometimes purple flowers. The people call it turtle-head and snake-head, because the corolla resembles, in shape, the head of a snake or turtle. The flowers are sessile, in spikes or clusters; the leaves are lanceolate, on short stalks. It grows in wet places, blooming from July to September. All parts of the plant are bitter.

MEDICAL PROPERTIES.—Balmony is a superior tonic, possessing that property in common with hydrastis-canadensis, calumba, gentian, frazera, and coptis, but it possesses some other valuable properties, which commend it to our notice. It has a direct affinity for the liver as well as the stomach. It has frequently cured jaundice, given in small doses. I have tried the chelonin in my own person for inaction of the liver and dyspepsia, and found it very positive in its action in both respects. I often use it in cases of indigestion, accompanied with obstruction of the biliary secretions, and I have found it a positive tonic to the liver and stomach. I have used the chelonin in doses of 1 to 2 grains, three times a day, or the saturated-tincture in doses of $\frac{1}{2}$ to 1 drachm, three times a day. The dose of the fluid-extract is from 20 to 30 gts. It is an anthelmintic of some power.

BENZOATE OF AMMONIA.

The benzoate of ammonia has a peculiar tendency to the kidneys, which renders it a direct remedy in certain abnormal conditions of them. In cases of dropsy, following scarlatina, where there is scanty, dark-red, bloody-looking urine, with a

pungent odor, depositing a thick sediment, this remedy will prove very valuable. In dropsy, where there is a scanty, dark, smoky-colored urine, with albuminuria-dropsy, the benzoate of ammonia will prove of positive utility. In all gouty affections it is also indicated, especially where the joints are red and swollen; also, where there are deposits of the lithate of soda in the joints and toes. It is an excellent remedy in rheumatism, and may be alternated with such other remedies as are indicated; for instance, in the inflammatory form, if the fever run high, aconite or veratrum should be given to control the circulation, as the benzoate of ammonia does not meet that morbid element of the disease directly, but indirectly, by correcting the state of the blood upon which the disease depends.

It has a direct tendency to remove the lithic-acid from the blood; and this tendency renders it applicable in many cases of disease, besides the ones above named. The dose need not be large. It is best triturated with sugar of milk, 1 grain to 10 of the sugar of milk; the dose is 5 to 10 grains, of the trituration.

THE BROMIDES.

The bromides are the oldest of the new remedies, yet some of them have not yet become generally known; consequently, we may profitably notice them. The introduction of these salts into practice marked an era in therapeutics as they have been of vast benefit in the treatment of many peculiar morbid conditions of the brain not well met by any other remedies. The modifying influence over epilepsy entitle them to a high place in *materia-medica*. The bromides differ somewhat in their effects upon the brain; but one leading effect of most of them is, to contract the blood-vessels—notably those of the spinal-cord and brain—quieting irritability, and thereby often producing sleep. They quiet nervous erethism; in proper doses, lessen hyperæsthesia of the reflex nervous system, and control spasmodic action; hence, their applicability in many nervous affections, as well as of diseases of the spinal-cord and brain, and of such diseases as have their origin from the spine and brain. The bromides do not all have precisely the same action, but each one has its peculiar action to direct, as in their use. I have used them a great deal in my practice—ever since Prof. Hammond published his work upon nervous diseases.

BROMIDE OF AMMONIA.

The bromide of ammonia has an affinity for the brain, cervical, and dorsal division of the spinal-cord, with some influence over the eyes and nose. It is preferable, in many cases, to the bromide of potassa, especially where there is congestion of the base of

the brain or the spinal-cord; hence, it is the remedy in cerebro-spinal-meningitis, basilar-meningitis, and severe occipital headaches. It has not been as highly recommended in epilepsy as the bromide of potassa, yet in those cases that occur from basilar congestion (as many cases do, from masturbation and other sexual abuses) I find it then the best remedy; and in the above conditions, it need not be given in those enormous doses that are recommended by some writers, but in medium doses, say from 3 to 5 grains every two or three hours; for, like all brain remedies, the bromides have a primary and a secondary effect, and the primary effect is to quiet irritability by lessening the circulation in the nerve-centres; but excessive doses, or the too long-continued use of these remedies, like others of the class, exhaust the susceptibility of the nervous system and disappoint us in our object in their use. A very strong man may require from 20 to 30 grains every three or four hours, until the symptoms are controlled; but it is rarely that such large doses are required in ordinary cases.

Dr. Gibbs, an English surgeon, found this salt a good remedy in strumous-ophthalmia, conjunctivitis, cornitis, and leucoma. It has been found also efficient in catarrh of the posterior nares and fauces, with a thick discharge. It is valuable in some cases of cough, when it is sudden, spasmodic, and causes pain. It is recommended in amenorrhœa and dysmenorrhœa, from congestion of the uterus.

In the treatment of epilepsy, convulsions and sleeplessness, the bromide of potassa seems to act with more power than the bromide of ammonia. To ward off an attack, however, this salt, in doses of 20 or 30 grains, will generally succeed. In that sleepless condition, often connected with attacks of cerebro-spinal-meningitis, 20 grains may be given at once, which will generally produce sound and refreshing sleep, and at the same time, lessen the congestion or tergescence of the vessels of the brain. It is not as liable to pustulate the skin as the potassa-salt, hence may alternate it with good effect in most cases.

BROMIDE OF CALCIUM—(BROMIDE OF LIME.)

The bromide of calcium resembles, in its action, the bromide of potassium and chloral-hydrate. Prof. Hammond prefers it, where there is congestion of the brain, and delirium and sleeplessness, or in sleeplessness alone with nervous irritability. It is a valuable remedy in that peculiarly impressible and irritable condition attending the stage of dentition in many children. In this condition, the size of the dose will depend upon the urgency of the symptoms; from 1 to 10 grains, but generally from 1 to 3 grains, every three or four hours, is sufficient for ordinary cases. In the incipient stage of cerebral affections of children, this salt acts much like *solanum-nigrum*. There is no great danger in

giving this salt boldly, where it is indicated, as it only contracts the cerebral vessels, and thereby preventing congestion, and at the same time diminishes the tendency to reflex irritation. One grain for each year of the child's age may be given every hour or two without any risk. In children, fed by the bottle, it may be added to the contents of the food and fed to them. In thin children of bilious temperament, the bromide of soda is thought to be preferable. This salt has not been much used for the purpose of controlling the attacks of epilepsy.

BROMIDE OF CAMPHOR—MONOBROMIDE OF CAMPHOR.

This salt consists of one equivalent of camphor united chemically with one equivalent of bromine; chemically expressed, C. 10 H. 16 O, Br. It is a crystalline salt of a white color, having the odor of camphor, and slightly, that of the bromine. It very readily decomposes in the atmosphere, at the heat of 100° F. Bromide of camphor was first used by Prof. Hammond in the United States, and by a Belgian physician before it was used by Prof. Hammond. The union of these drugs forms a happy combination. Camphor, in large doses, tends to produce cerebral congestion, but the very great power of bromine to contract the cerebral vessels counteracts the evil tendency of camphor; it is believed, however, that the camphor predominates in very large doses, and that this salt will produce congestion of the brain in over doses. Prof. Hammond gave it in moderate doses, and seems to have succeeded with it well. It is useful in cerebral anæmia from any cause, also in hysteria, infantile convulsions due to teething; in the last case the dose would be one or two grains rubbed up in mucilage or acacia; generally one or two doses is sufficient. In hysteria the dose is three or four grains every hour or two. It is a good remedy in passive spermatorrhœa in small doses; also in chordee and mymphomania, in doses of three grains, at bedtime. It will be a remedy for cholera.

BROMIDE OF LITHIUM.

The bromide of lithium is preferable for long continued use, as it is not liable to cause pustular eruptions on the skin, and it acts more speedily than the other salts of bromine. It has succeeded in warding off attacks of apoplexy in doses of thirty grains. And there are some cases of epilepsy on record cured by ten grains, twice a day. Very often where the other salts of bromine lose their effects I have found this to succeed. The cost, however, will ever be an objection to its general use. It doubtless will prove a valuable remedy in rheumatism, also in irritable bladder, with hyperæsthesia, from excess of uric acid in the urine. I may

here state an important fact connected with the use of the bromides, which is: that from the very positive power they possess over the vessels of the brain, that their too long continued use might lead to cerebral anæmia, and this condition kept up, it may lead to deficient nutrition; hence the bromides should not be continued too long in very large doses. Massive doses have been known to produce melancholic delusions, loss of memory, etc. And again, massive doses, by the secondary effects, have caused intense congestion of the brain and its meninges; hence, they should be used with caution.

BROMIDE OF SODIUM AND POTASSIUM.

These two salts have similar effects upon the vessels of the brain, and for that reason I introduce them here together; but it will be remembered that the bromide of sodium is preferable, as it is much less irritating to the mucous membranes of the stomach and bowels, and is much pleasanter to the taste. Besides its valuable effects in epilepsy, in common with other bromides, it is a valuable remedy in delirium tremens, given in doses of five to ten grains every one or two hours. Whenever the face is flushed, the eyes red, the pulse quick and hard, with delirium of a wild, raving type, accompanied with illusions, then the bromide of sodium or the potassium may be given with confidence. But on the contrary, if the face is pale, the pulse thready and weak, then digitalis will prove a much better and altogether safer remedy. In that peculiarly unpleasant condition of the nervous system, causing night terrors of children, either from reflex irritation of teething or gastric congestion, the bromide of sodium, in doses of two or three grains, according to the age of the child, given at bedtime, will produce a sound and undisturbed sleep. It frequently cures epilepsy, when from congestion of the brain, and relieves it under any circumstances, more or less.

BROMIDE OF QUINIDIA—BROMIDE OF QUININE.

The above salt has not been much used, but is doubtless destined to rank with our best new remedies. The alkaloids of the bark, in very large doses, are all liable to produce unpleasant effects upon the brain, especially upon the auditory nerves, and in some cases upon the ophthalmic nerves. In my own person the quinidia has always proved exceedingly unpleasant in its effects, producing not only partial deafness, palpitation of the heart, great prostration while under its immediate influence, but also congestion of the brain, with violent headache, etc. These effects can be counteracted by a combination of bromine with the alkaloids of the bark, and then it can be given in moderately large doses,

where required, without the risk of producing the above-named unpleasant effects upon the brain and nervous system. And in periodical neuralgias, it will be found the remedy required, as the bromine aids materially in the removal of that peculiar hyperæsthesia of the nervous system which gives rise to this form of neuralgia. The dose of this bromide is from six to eight grains in a little cold coffee or whatever other fluid may be preferred; and the dose may be much higher in the intensely malarious localities, even twenty to thirty grains.

BROMIDE OF ARSENIC—LIQUOR ARSENICA BROMIDI.

This is formed as follows: Arsenious acid pulvs., 1 drachm; carbonate of potassa, 1 drachm; bromine, 2 drachms; water enough to make twenty ounces; boil the arsenic acid and the carbonate of potassa together until the dissolution is completely effected; add enough water to make the 20 ounces when the mixture has cooled; then add the bromine. This should replace Fowler's solution, which is uncertain in its action, owing to the fact that it often decomposes. The above compound becomes stronger by age, and does not decompose. It has the effect of Fowler's solution, only it acts with much more certainty, and is not liable to irritate the stomach. The dose is one or two drops in water, three times a day, and may be continued as long as required without danger of irritation. Fowler's solution has long been used in skin diseases, and in some old chronic agues; and imperfect as it is, it often proved very efficient in such cases; but the bromide of arsenic will be found a much safer and more active agent. I use this bromide in all cases where I used to use Fowler's solution. In dry skin diseases, it will be found a trustworthy remedy; but in those attended with an acrid, ulcerative humor, I use the iodide of arsenic. In many chronic cases of chills the above compound will act well with the bromide of quinidia. It seems to excel the other bromides in the cure of epilepsy: try it.

CEREUS BONPLANDI.

(The dose of the saturated tincture is from five to fifteen drops every three, or even two hours, as the symptoms demand.)

Cereus bonplandi has lately been introduced to the medical profession by Dr. Richard E. Kunze, of New York, who has investigated the properties of this species of cactus, and several others, with great care. I was led to test it by his report of its properties. I have been using *cereus grandiflorus* for some time, and I am very much pleased with it, but find the *bonplandi* a superior remedy. It has a direct affinity for the heart, and thereby readily relieves many morbid conditions of that organ very

promptly. It has the power to control the contraction of the muscular fibres of the heart, especially the circular fibres, and thereby it relieves angina pectoris (which has been regarded as neuralgia of the heart), which is a cramp of the circular fibres of the heart. In valvular diseases of the heart, although cactus does not cure, yet it will palliate them more than any remedy we have, except it be the grandiflorus; that article acts very similarly. Hypertrophy, with enlargement, is directly under the control of the bonplandi. Hypertrophy, with dilatation, is not so much influenced by the bonplandi or the grandiflorus as it is by digitalis, lycopus or iberis. The following symptoms call for the bonplandi, viz.: A sense of drawing or tightness at the heart; palpitation of the heart, day and night; worse from walking or when lying on the left side; functional disease of the heart, increased by emotional excitement, or, in women, at the menstrual period; angina pectoris; palpitation, either from organic or functional diseases of the heart, will be relieved by the continued use of the cereus bonplandi; acute inflammations of the heart, either rheumatic or idiopathic, call for it, and it here may be alternated with aconite or veratrum, which ever is indicated by the state of the pulse; chronic carditis, with œdematous and cyanotic face, difficult respiration, dull pain in the heart, dropsical effusions in some of the cavities or over the body, cold feet, and intermittent pulse, calls for cereus bonplandi; in organic disease of the heart or in valvular disease, it is a valuable palliative for many of the distressing symptoms; many persons with indigestion are troubled much with a violent fluttering sensation over the cœliac axis; in this condition, nothing equals the bonplandi or the grandiflorus, for either will relieve this very unpleasant sensation; when there is a whizzing sound, or *bruit de soufflet*, as the French call it, the bonplandi will give relief very promptly; in enlargement of the right ventricle, known by increased dullness of sound, excessive impulse of the heart's action, the bonplandi is called for, and will always give much relief, if not cure the disease.

CANNABIS INDICA—HEMP.

(ONE OF THE OLDEST OF THE NEW REMEDIES.)

If we could get a good preparation of the hemp from India, in a fresh state, it would be a valuable remedy; but we have to depend upon that prepared by the Chinese, called *churru*, a crude extract imported from India. A saturated tincture made of this in (60°) alcohol is as good as any preparation we can get; the dose is from two to eight drops. It is a stimulant to the spinal centers in small doses, but in large doses it is intoxicating. It has a very beneficial influence over the reproductive organs. It relieves irritation also of the urinary organs. In irritable bladder and urethritis it has a very beneficial influence. In gonorrhœa it

is also a good remedy. In spermatorrhœa, alternated with such other remedies as may be indicated, it is a valuable remedy; it controls the irritability of the nervous system, and thereby aids in curing the disease. It is a prompt remedy for menorrhagia, checking it most promptly.

CHIMAPHILLA UMBELLATA—PIPSISSAWA.

The fluid extract of chimaphilla will be found a valuable tonic and diuretic. I use also a saturated tincture made from the fresh leaves with good effect in dropsy, and many kidney affections. I have cured some grave cases of dropsy with this article alternated with iron. The dose of the fluid extract is from one to two drachms every two hours. Dose of the tincture two to three drachms.

CALENULA—YELLOW MARIGOLD.

The calendula is too well known to need any description, as it is much cultivated in yards and gardens as an ornamental flower. There are two kinds, one with a small bloom and the other with a large bloom: both are of a bright-golden yellow, and I have used only the large-flowered variety. It is not much known to the medical profession, but fills a place in the materia-medica; hence, I introduce it.

MEDICAL USES.—The tincture of the flowers just as they have fully expanded, made with (50°) alcohol, is one of the best dressings that I have ever used, except the balsam cucumber. I have used both; and either of them will prevent any excessive inflammation of a bruise or flesh cut, thereby causing the cut surface to adhere by the first intention without suppuration. I usually apply the tincture (as above made, saturated) by dissolving sugar in it to form a paste, so as to retain the tincture on the cut or bruised surface; reapplying it as soon as it dries. Thus used it prevents inflammation and heals the sore very quickly. Its action is doubtless like that of arnica upon the capillaries. It has the peculiar power to contract them, and thereby prevent an undue circulation or stasis of the circulation in the part; hence the part heals readily.

CAULOPHYLLUM THALICTROIDES — BLUE COHOSH, SQUAW ROOT.

The blue cohosh is a perennial root, much matted, and the root-stalks very knotty, sending up a simple, naked stem in early spring, terminated by a panicle of yellowish-green flowers supported on pedicles, and just below this a large compound leaf composed of three ternate leaves without any common pedicle.

The whole plant is covered with a greenish-gray powder when young. It has a smooth, purple stem when young, growing to the height of one or two feet, dividing above into two parts, one of which is a large, divided leaf-stalk; the other bears a smaller, double-ternate leaf at its base. The flowers appear in April and May. For plate and botanical description of this and other indigenous remedies see the author's new and general materia-medica and therapeutics.

MEDICAL PROPERTIES.—This article has an affinity for the white fibrous tissues, and has often cured rheumatism of the small joints, as of the fingers, wrists and toes. It is also a very positive remedy for spasmodic pains of the uterus. It is also a remedy for suppression of the menses—*dysmenorrhœa*. It is a remedy, in small doses, for habitual miscarriage or abortion. It is a uterine tonic, and in small doses it tones up the uterus, and thereby renders labors much easier and prevents them from being too tedious; yet in large doses it is a parturient.

CISTUS CANADENSIS—ROCK ROSE.

Cistus canadensis is a very direct alterative, influencing the process of retrograde metamorphosis very powerfully, at the same time it increases nutrition. In that peculiarly depraved condition of the fluids or solids, known as *scrofula*, it is of especial advantage. It seems to hasten the displacement of aplastic materials, and at the same time to so improve nutrition as to replace it with healthy tissue-making materials. It is equally applicable in other chronic diseases associated with or dependent upon enfeebled nutrition where there is constantly accumulating imperfectly formed plasma, so that all the solids and fluids are in a diseased state, as in rickets, *eczema*, *tobes mesenterica*, *morbus coxaria* and many kindred morbid affections. It is very favorably spoken of as a remedy in chronic *diarrhœa* and *dysentery*. I have used it a great deal in *scrofula*, *syphilis* and some skin diseases with marked success. If it can be procured fresh, and a fluid extract formed out of it in that state, it is a very positive alterative; or a saturated tincture will answer the same purpose. It, like many other very valuable vegetable remedies, has never been appreciated, from the fact that mostly it has been used in its old, dry state, and, of course, it was inactive. The dose of the fluid extract is from twenty to thirty drops, three times a day.

CAULOPHYLLIN.

Caulophyllin is a principle manufactured from the *caulophyllum*, and contains its parturient powers. I have frequently used it in cases of tardy labor from inertia of the uterine muscles, and have derived immediate effects from it. It does not produce those

violent, spasmodic contractions of the uterus that ergot generally produces, but gently stimulates the nervous system, and through that produces regular contractions much like those of natural labor. It certainly expedites labor where it is tardy from a want of nervous energy. I regard it as one of the mildest and safest, yet most efficient parturients in the materia-medica. As an emmenagogue it is very mild in its effects, and yet tolerably certain. In leucorrhœa I have frequently combined this with hamamelin with good effect. It, like the caulophyllum, is anti-spasmodic to some extent, and may be used in painful menstruation with the viburnum opulus or prunifolium. In very small doses it tones up the uterine muscles and prepares for parturition. I very frequently give small doses of this—aletrin, helonin cimicifugin and viburnin a few weeks before confinement of females that are subject to tedious labors, and have always found this combination of material aid in such cases. I oftener use the tinctures of the above remedies than the solid extracts for this purpose. This article has a direct affinity for the uterus. The dose of the caulophyllin is from one to three grains, repeated every three hours, for obstetrical purposes.

CIMICIFUGA RACEMOSA — MACROTIS RAC — BLACK COHOSH.

(THIS IS ONE OF THE OLD (NEW) REMEDIES.)

This is an indigenous plant, growing abundantly in middle and upper Georgia and many parts of the United States, in shady and rocky situations in rich soil. It is the *macrotis racemosa* of Rafinesque; the *actea racemosa* of Linnæus, and called by the people black snake root, rattle weed, etc. It grows from four to six feet high; the stem is simple, smooth and branched at the top. The leaves are fine, alternate, the lower one nearly radical, divided several times, the upper one two-pointed; the leaflets oblong, egg-shaped with stem opposite, incised, and from three to seven-toothed. The flowers are one-styled—white, foeted, in long, slender, racenus sepals, four or five, falling off early; petals white, four to six, and small; stamens slender, white, and about a hundred to each flower, giving the raceme the appearance of a plume; one pistil with a broad stigma. The fruit is a capsule, one-celled, ovoid and dry, containing many seeds. The root is black, rough, knotty and of a bitter taste, and yields its virtues to pure alcohol.

Medical Properties.—This is a polychrest; it has a diversity of actions. It is a very active tonic to the digestive and assimilative systems; and upon this property it cures rheumatism by preventing fermentation in the stomach, and by increasing elimination through the kidneys. The macrotin is much used in doses of one or two grains every three hours.

MACROTIS RACIMOSA—(CONTINUED.)

This is a medicine, as stated above, that has a very wide range of action. It is tonic and stimulant to the nervous system, and a very active anti-spasmodic, with some alterative power, and marked expectorant properties. Some writers regard it as an anti-periodic. Dugleson regarded it as a sedative; and its producing giddiness, tremors and headache, is an evidence of its sedative powers and of its narcotic tendency. It seems to act as an excitant to all the excretory organs, therefore it possesses some considerable alterative properties.

It is a good expectorant in chronic affections of the respiratory apparatus, especially in phthisis. In this disease, united with iodine, it is a good remedy to arrest tuberculous deposits, and to remove them when they are already formed. In rheumatism, pushed to its narcotic effects, it is a good remedy, and may be associated with colchicum, and other remedies. As an emmenagogue, I have often used it with good effect. It is a very good parturient, when united with caulophyllum, or the gossypium. It is a good remedy in eruptive diseases, when the eruption does not readily appear. Dose of the saturated tincture, 20 to 30 gts; dose of the fluid extract, 5 to 15 gts.

CARDUUS MARIA—(BLESSED THISTLE).

This is one of the old remedies; yet, it seems that it has never been appreciated. It grows in waste places in Southern Europe, common in England, but only found in America when cultivated. It is an annual, and blooms from June to September. Rademacher used it, and prepared a tincture of the seeds. The root and hull of the seeds contain its medical virtues. It is an analogue of chelidonium, podophyllum, chionanthus and leptandrum. It has a specific affinity for the liver and portal system. For enlargement of the liver, with deficient action, carduus has been known to act finely, reducing the enlargement, and restoring the obstructed secretion in a most prompt manner. In jaundice, with gall stones, it has proven one of our most trustworthy remedies. There are many cases of jaundice reported as cured by it. In pulmonary diseases, connected with, or depending upon hepatic obstruction, this is a very positive remedy. It is frequently prescribed for stitches in the side (which generally precede hepatic obstruction) in Europe, and, it is said, with almost uniform success. It is very certain that this humble plant is worthy of more notice than it has ever received from the profession in America. The fluid extract would be a good form for use, or Rademacher's tincture, which was made by adding 1 lb. of the seed to 1 pint of alcohol. The dose would be 1 or 2 oz. It should be further tested. It is certainly an active remedy.

CEANOTHUS VIRGINIANA—RED-SHANK—JERSEY TEA.

This little humble plant grows very plentifully in most of the Southern States, and goes by the name of red-shank. It possesses some astringency, more especially the root. During the late war a physician, whose name I do not recollect, communicated, through the *Atlantic Medical Journal*, his very flattering success with a tincture of the root of this plant in enlargement of the spleen; since which time, several others have communicated the like successful use of it in the same affection. And there can be no doubt that it has a direct affinity for that organ. The reporter in the *Atlantic Journal* says of it: "I used this plant for splenitis, and so well satisfied have I been with the results, that for six years I do not remember to have used anything else for enlarged spleen. I have used it in the worst cases I ever saw, from infancy to old age. I have yet to see or hear of its failure in a single case, however inveterate." This is but another illustration of that grand law of affinity of remedy to organ, that if we will only study, we may cure other diseases as positively as ceanothus cures splenitis. The Infinite Mind left nothing incomplete, but has adapted a remedy for every malady of man. The part used is the leaves, in doses of from 1 to 20 drops of the saturated tincture. The roots and leaves would probably be better. The tincture is made 1 lb. to 1 pint of alcohol.

CHELIDONIUM MAJUS—(GREAT CELANDINE).

This is a perennial plant, growing in Europe, and is known by the fact that when wounded it gives out a yellow, milky juice. The root is of a reddish-brown color, cylindrical, with many fibres; the stem upright, hairy, branched, from one to two feet high; the leaves are soft, pinnate, netted, and of a bright green color, with large, trifid terminal lobes; tip, oval, sinuate, or crenate; petioles winged and hairy; flowers have four petals, yellow, in four-to-nine-flowered axillary cymes, each flower with a peduncle and bract; petals nearly round; calyx consists of two convex, green, deciduous, nearly smooth sepals; stamens, twenty, divergent, equal; the fruit is a silique, many-seeded, knotty capsule, with two carpels; the seeds are blackish-brown.

Medical Properties.—This plant, like the sanguinaria, contains chelerytherin, a principle that has a specific affinity for the liver, portal system, lungs and kidneys. It increases the circulation of the fluids of the portal system, and in the lymphatic vessels, glands of the bowels, and hence causes a more active metamorphosis of the vegetative system. Rademacher says that it acts upon the internal structure of the liver. It, however, has the power, in large doses, of exciting the entire arterial and capillary system, much like aconite. It is a valuable liver remedy, and cures bilious headache, arising from obstruction of the action of

that organ. It has proven a very positive remedy for some periodical sick headaches located in the eyebrows or temples, but generally periodical headaches yield more readily to gelseminum. It has considerable reputation in inflammation of the eyes. But its chief value is in diseases of the liver. When the feces are white, or light colored, and the bowels constipated, and a pain in the region of the liver, and radiating to the scapula, then chelidonium will give relief. In cases of acute and chronic hepatitis, jaundice from absorption of bile, jaundice caused by catarrh of the biliary ducts, cheledonium, alternated with chionanthus, will prove positively certain. In the above conditions, it should be given in small doses, from 10 to 20 drops of the tincture three or four times a day. Dr. E. M. Hale records a case of gall-stones, with jaundice, for two years, with congestive chills at times, and intense pain in the liver, and periodic cardialgia, cured with 2 drop doses of chelidonium every three hours, increasing the dose one drop every day up to ten drops, which, he says, expelled the gall-stone through the bowels. It is oftener indicated than podophyllin or quinine.

CHLORAL HYDRATE.

This article was discovered by M. Leibrich about the year 1867. Its odor resembles that of ripe muskmelons. It rapidly deliquesces when exposed to the air, and finally disappears. It dissolves in alcohol, ether and water. Two to five grains produce profound sleep in lower animals, being rapid and certain in action. From 20 to 30 grains produce sleep in man. The sleep produced by it is much like actual slumber, and generally commences fifteen to twenty minutes after the drug is swallowed, and lasts eight to ten hours. In children, one grain for each year of age is generally sufficient to produce refreshing sleep. It lessens pain in many cases; and for this purpose a full dose should be given at once, and repeated until it produces sleep or eases pain. One advantage this article possesses over opium is, that it does not arrest the secretions. Overdose produces stertorous respiration, fixedness of the eyes, contraction of the pupils, which are insensible to light, feeble and rapid action of heart, cold extremities, a flow of froth from the mouth, and insensibility of the skin. It is a valuable remedy in delirium tremens. It is valuable for insanity, especially for the form where there is a disposition to violence in the patient. It is valuable in tetanic convulsions, and also in chorea, etc.

CROTON CHLORAL—(CROTON CHLORAL HYDRATE).

This is formed by the action of chlorine gas upon aldehyde. It crystallizes in small, glittering tablets, and dissolves slowly in water. It is decomposed by alkalies.

Medical Properties and Uses.—Croton chloral has the power to destroy the sensibility of the cranial nerves, affecting especially the brain and the nerves of the head, face and jaws, etc.

It is a valuable remedy for neuralgia of the head and face, and is often palliative of purely nervous headache in nervous persons. It seems to have positive affinity for the fifth nerve; hence, valuable in toothache and cases of neuralgia of the upper and lower jaws and face, which are supplied by the fifth pair of nerves. From five to twenty grains have been used, dissolved in water. It makes some patients sleep, and some are relieved of pain without sleep. Leibrich, who discovered chloral, has discovered other æsthenetics. Denonine is found to put the patient into a deep sleep. It has, also, the remarkable property of producing very refreshing sleep; and if it prove harmless, this will render it very popular. The slumber is profound, and the nerves of respiration (from the medulla oblongata) seem stimulated, for the breathing is deep and rapid, whereby the quantity of oxygen taken into the system is large, and the elimination of carbon proportionately large.

CHIONANTHUS VIRGINICA—WHITE ASH—OLD MAN'S GRAYBEARD—FRINGE TREE.

This is a shrub from four to ten feet high, growing in sandy and rocky land, from Pennsylvania to Georgia; sometimes found on sandy river banks. It presents clusters of snow-white flowers in May and June, from which it is called fringe-tree, snow-flower, old man's beard, etc. The leaves are often from $\frac{3}{4}$ to 1 foot long, and nearly half as wide. The fruit is a drupe or berry-like nut, containing the seed. The root is used.

Medical Properties.—This is one of our most valuable new remedies, having a direct affinity for the liver; but it does not act immediately, like podophyllin, colocynth, sanguinarian, and celandine, but gently stimulates the liver to action. It acts more as a tonic to that organ than any remedy I have ever tried. And in cases of hypertrophy of that organ, we have no remedy that acts so kindly, yet certainly, to reduce the enlargement and bring the liver back to its wonted action. In chronic hepatitis, it seems to act in a way all its own in bringing about a normal circulation. But it is in jaundice that its specific powers were first so remarkably displayed. In the year 1843, I was a student in the medical department of the University of Georgia, and had a severe attack of jaundice, for which I was treated by my kind old friends, Drs. Dogas and Ford, of the faculty; but all their remedies failed to relieve the disease, or to ameliorate the symptoms in the slightest degree. In this state of utter despair, I finally concluded that I must succumb to the malady, but I, by accident, heard of a tailor that had been cured by jaundice with gin-bitters,

made of the chionanthus root, so I procured some, and made me a bitters in gin, by adding two ounces of the finely-cut root to one quart of gin. Of this I took a tablespoonful three times a day, and in ten days I was entirely cured of jaundice; and at the same time I found that it improved my digestion very much, and I continued it for a month or two, with much benefit to my digestive organs generally. This fact impressed my mind so sensibly that I determined to give it a further trial; and I soon had an opportunity, for in the town I settled in there was a gentleman that had an attack of jaundice every summer, and it lasted him for a considerable time, and he never had found anything to give more than temporary relief. I recommended him to try the chionanthus, which he did, and was cured in a few weeks, and so remained as long as I lived near him. A neighbor of mine was seized with jaundice, and he tried all the usual remedies, and at last came to me, and I prescribed the tincture of chionanthus, in doses of one drachm, three times a day; and he, likewise, was soon restored to health. During the late civil war there were a great many soldiers (who were stationed one summer at Yorktown, Va.), came home with jaundice. Many of those from near Athens, Ga., were sent to me for treatment, and I treated all of them with this remedy, for most of them had already had the usual treatment before coming to me, consequently, did not deem it necessary to repeat it; and out of the number that I treated, but one single case proved fatal, and that one, I am well satisfied, was a case of biliary calculi. A gentleman wrote to me, a short time ago, that he had several grave cases of jaundice, and wished me to send him a few pounds of the bark of the root, which I did, and he wrote me in a short time that it proved successful in each case. Since I published my use of it, I have seen reports in various medical journals of its success in jaundice and hypertrophy of the liver, as well as some reports of its use as a female tonic. I knew a case of hypertrophy of the uterus cured by the use of the chionanthus; used for a considerable time. The dose is from $\frac{1}{2}$ to 1 drachm, three or four times a day, of a tincture made of the fresh root bark.

COCA—ERYTHROXYLON.

Coca leaves are from a bush in South America, growing to the height of four or five feet. They are of a bright-green color: the bloom is white and the fruit is small, of a red color. The leaves are gathered when mature, and carefully dried. The fluid extract and saturated tincture are both used as medicines. In small doses, the coca stimulates digestion; in large ones, it augments animal heat, and accelerates the pulse and the respiratory movement. If continued daily, it produces constipation. In moderate doses it seems to stimulate the nervous system, so as to render it more able to endure fatigue. In very large doses, it produces

delirium and hallucinations. In moderate doses, however, it only induces pleasant *phantasmagoria*, without any subsequent depression of the nervous energies. It probably diminishes some of the secretions. While it stimulates the stomach, it has a calmative influence over the mucous membranes of both the stomach and bowels. It has a very quieting effect upon the genito-urinary organs, and is of great utility in the treatment of certain diseases of that part of the system, especially that of spermatorrhœa, and all debilities of the generative organs. It is also a good remedy in dysmenorrhœa, sterility or barrenness.

The fluid extract may be given in doses of from 30 to 40 drops; the saturated tincture may be given in doses of 40 to 60 drops, *ter die*.

COLLINSONIA CANADENSIS—(STONE ROOT).

This plant has a smooth, round, straight, single stem, from one to three feet high. The leaves have broadly-toothed edges, pointed, having long foot-stalks, heart-shaped at the base, large, and there is generally not more than three or four pairs to the stalk, broad, egg-shaped sharp-pointed, smooth on the surface, with small veins. Flowers are on long foot-stalks, fragrant, opposite, with short, oval, floral leaves, forming terminal, leafless, irregularly branched clusters. The corolla is two thirds of an inch long, yellow, tube-shaped at the base, spreading above in two lips, the upper one being short and notched, the lower one lobed on the sides and fringed around. Stamens two, long and protruding; another, oval style, protruding; seeds often aborting, and only one ripening. The root is perennial, which is large, knotty, hard, with slender fibers. It is known by the people by the name of ox-balm, stone-root, hard-hack and knot-root. It is indigenous to the United States, and grows on rich, hickory lands, flowering in September, and should then be gathered and immediately tinctured, or made into a fluid extract. This plant has been used some time; but its virtues were not procured from the preparations used, from the fact that they were made with the dried root, which is worthless, like many other remedies which are our most valuable ones.

Medical Properties.—Collinsonia was first used by the Indians for sprains, bruises, sores and contusions; then by some *root doctors* for colic, dysentery and diarrhœa; while as a tonic to the mucous membrane it may have had some beneficial influence in the above conditions, that is not its sphere of action. There can be no doubt now that it acts upon the venous circulation much like *æsculus*, *arnica*, *hamamelis*, and *hydrastis*, or *Ignatia's* bean. It certainly has the power to contract the caliber of the portal veins, and it is very probable that it has the power to contract all the blood vessels and the heart itself. If it is applied to a counterpart, the vessels of the part soon contract, and the inflammation

is soon relieved thereby. This is proof conclusive that it has decided power over the capillary vessels. It has cured many cases of catarrh of the bladder by its specific power over mucous membranes. And I have used it with good effect in leucorrhœa and prolapsus of the uterus. I cured a very bad case of varicocele with this remedy, given internally, and hamamelis applied externally. It has been known to act well in menorrhagia and vicarious menstruation. Now, it is plain that all the above diseases were cured by it, simply from its controlling power over the circulation. Its most valuable properties are its curative effects in hemorrhoids and prolapsus of the rectum. It has direct effect upon hemorrhoidal tumors, and will cure them if they are recent, and not too large. If they are large, the persulphate of iron should be applied locally, while the collinsonia is given in small doses, say from five to ten drops three times a day; it should not be given in large doses lest it purge, for it has such direct affinity for the rectum and pelvic region that large doses are apt to produce a purgative effect, in which case the effect upon the capillary circulation is lost. It has cured cases of irritable heart; and an eminent physician informed me that he had cured several cases of valvular disease with this remedy. I think I have derived good effects from it in some cases of heart disease, but I have generally given it, alternated with cactus, so I can not say which had the greater influence; but am satisfied that collinsonia is of very material advantage in organic disease of the heart. I have cured several cases of palpitation and enlargement (dilatation) of the heart by the long continued use of this remedy. Varicosis is cured by collinsonia, when it is a general disorder of the vessels. I should always use it where hamamelis fails. The dose is from 5 to 20 drops. I usually give from 5 to 15 drops.

CYPRIPEDIUM PUBESCENS.—(LADY'S SLIPPER.)

This plant has a stem about a foot high, single, bearing three or four broad, ovate, downy, ribbed leaves, clasping the stem at the base, and has one or two large flowers, consisting of two lanceolate, brownish-purple sepals, and a pair of narrow, wavy petals, crossing each other at right angles, from the midst of which projects a large yellow pouch, resembling a shoe or slipper, hence it is called Moccasin-flower or Lady's Slipper. The root is fibrous and branching, which is the part used.

Medical Uses.—When an infusion or extract is taken by a well person, it first causes, more or less, exhilaration of the mind and nervous system; and if continued it produces a calmness and quiet; but if still continued in larger doses, it produces mental oppression, heaviness, and a disposition to drowsiness and lethargy. It has a specific affinity for the cerebro-spinal system, acting upon the gray nerve-tissue, and is very useful in reflex-

nervous excitement. I have found it useful in hysteria, chorea nervous headache, delirium tremens, hypochondriasis, neuralgia and nervousness; for these affections it is only palliative, like opium and other nervines. In cases of reflex excitability of the cerebro-spinal centers, where the brain becomes irritated and convulsions result, it may be alternated with the bromides, and will be found better than atropin.

In sleeplessness, from functional disorder of the nervous system and brain, or mental excitement, it generally acts promptly. In that mental depression and irritability, resulting from venereal excesses, or from spermatorrhœa, cypripedium acts very favorably. In typhomania, tremors, restlessness, and morbid vigilance in typhoid diseases, I have found the cypripedium to act like a charm. In such conditions, from one-half to one grain of the cypripedium, or 15 or 20 drops of the saturated tincture, given every hour or two, seldom fails to produce quiet and refreshing sleep. In that peculiarly irritable state, produced in children by teething, or worms, or from overloading the stomach, this remedy, provided there is no congestion of the brain, will allay the irritability, and thereby often prevents spasms. In cerebral hyperæsthesia, from over mental labor, cypripedium, in small doses, will often do much good; it acts as a nerve tonic in such conditions. Some physicians use opium in such conditions, and often greatly to the detriment of their patients, for opium tends to congest the brain, and its use is attended with evil in all the above conditions. Now, in the use of the cypripedium, we may get the quieting, tranquilizing effects of opium without its evil effects, which is to check the secretions and bind the bowels. The usual dose of cypripedium is from 10 to 20 drops of the tincture, or even 30 gts.

CUNDURANGU.—(CONDOR-PLANT.)

This is a climbing plant, growing in Ecuador, South America. It was first introduced into the United States by Dr. Bliss, of Washington City, as a remedy for cancer, but it did not prove a specific in that disease. Dr. Andrews, of Chicago, corresponded with many of the most eminent physicians of South America, and while they denied its curative powers over cancer and syphilis, they testify to its usefulness in old, foul, obstinate ulcers; and doubtless from its specific influence over that depraved condition of the blood, disposing to decomposition of the integument, and sometimes to the mucous tissues, the idea of its curative power over cancer originated. A number of physicians have reported favorably of it in the treatment of old, foul, indolent ulcers. Dr. Cloton Muller, of Germany, reports that he has used it in twenty cases; some, he says, were carcinoma, some benign glandular swellings and ulcerations, doubtless scrofula. It did not appear to act favorably upon scrofulous ulcers, or scirrhus indurations.

He cured a case of suppurating tumors of the thorax, near the nipple; these were foul-smelling ulcers with raised edges. They were cured in two months with the cundurangu. He cured an ulcer, of the size of the hand, over the false ribs, which had high, uneven edges, with small islets of half-destroyed cellular and muscular tissue at its base, discharging an ichorous secretion, accompanied with severe pains. These were old, foul, ichorous ulcer, that originate in persons of depraved nutrition, from a want of either appropriative power, or a want of good, healthy, mixed diet, to form healthy tissue-making materials.

Although the cundurangu has disappointed the sanguine expectations of the profession in its vaunted curability in cancer, yet its real value in old, indolent ulcers should not be neglected. If given in doses of 10 to 20 drops of a fluid extract, or 20 to 40 drops of saturated tincture, three times a day, it will be found valuable in old, ichorous ulcers. The tincture may also be applied, diluted with glycerine, one or two parts, to the ulcer at the same time that it is given internally. It seems to act very much as iodide of arsenic in these cases of indolent and ichorous ulceration, and may be alternated with that article. The cundurangu doubtless acts as a general tonic to the appropriative and digestive organs, making better tissue to replace that of imperfect vitality, and so does many of our alteratives act in this way.

CLEMATIS VIRGINIANA—(VIRGIN'S BOWER).

The clematis is a native of the United States, growing on streams, in hedges and thickets, from Canada to Georgia. It flowers in July and August. The bark, leaves and blooms are used in medicine, and should be tinctured while fresh, as age destroys their virtues entirely. It is a perennial, climbing plant, with a stem or vine some twelve to fifteen feet high, running on shrubs, fences and trees. The leaves are of a deep-green color, threefold; the leaflets are egg-shaped, or heart-shaped, sharp-pointed, in lobes, edges dentated, and from three to three and a half inches in length, by one or two inches in breadth; the flowers are in clusters, irregularly branched. It is not uncommon to find the stamens on one plant, and the pistils on another. The clusters of flowers spring from the junction of the leaf-stalk and the stem or vine, and each flower has four sepals, white, long and obtuse, and spreading, and also about thirty stamens. The fruit is furnished with long, plume-like tails, in downy-like tufts; the seeds are compressed. It is of the Anemone family.

Medical Properties.—This plant belongs to the same class with pulsatilla, and resembles it in action. It has a salutary action upon the organs of generation, uterus and ovaries, testicles and spermatic cord. It has a direct action also upon the skin and glandular system. It influences the nervous system, controlling erethism. The dose of the tincture is from 5 to 15 drops *ter die*.

CORYDALIS FORMOSA—TURKEY CORN OR PEA.

This is an indigenous little plant, growing westward and southward of New York, as far South as North Carolina. It grows on rich soil, on hills and mountains, among rocks and decayed trash, and flowers early in the spring. It grows from six to ten inches high, having a small, tuberous root. The leaves are radical, rising from ten to fifteen inches high, somewhat threefold, with incisions variable. The flower-stem is also radical naked, about eight inches high, and has from six to eight bunches of flowers, each bunch consisting of from ten to six reddish-purple, nodding flowers. The inflorescence is compound. The corolla is from eight to ten lines in length, broad at the base; the spines are very short, obtuse and incurved; the flower-leaves are purple, and are at the base of the pedicles; the style is extended; the stigma two-horned at the apex; the sepals are two; the capsule pod-shaped and many-seeded. The root is the part used.

Medical Uses.—This is an analogue of iodide of potassium, stillingia, gold, phytolacca and menispermum. This is one of the remedies from the vegetable kingdom, which partakes of the nature of some of those from the mineral kingdom. This remedy is an alterative, or catalytic, in the prime sense of that term. It sets up catalysis in the system. It is one of those agents that not only has the power to break up and combine with *materias morbi* in the system, but it likewise has the peculiar property to influence the eliminating organs and enunctories, such as the skin, kidneys, liver, glands and bowels to a vigorous action, and thus to throw off the morbid matter from the blood. Thus it is plain that it is a remedy for that deadly poison called syphilitic, as well as that that leads to scrofulous decomposition.

The entire inefficiency of the ordinary remedies in use, when I commenced the practice of my profession, led me to search for remedies upon which I could rely with confidence in the treatment of syphilis; and after repeated trials of *corydalis formosa*, I am satisfied that it is far superior to any of the old remedies in use, such as sarsaparilla, guaiac, etc. I have tried it, combined with iodide of potassium, stillingia, and other new remedies, in all forms of syphilis, and find that they remove the poison from the blood in secondary and tertiary syphilis with much efficiency and certainty. In the primary form, I use the chloride of gold and soda, where I used to use mercurials; and then, if secondary or tertiary symptoms intervene, I then use the *corydalis*, *phytolacca* and *stillingia*, or the *corydalis* and iodide of ammonia or lime. The *corydalis* is not only a positive catalytic, but also possesses active tonic properties, which render it a remedy peculiarly appropriate in cases of scrofula, and also in those cases of secondary and tertiary syphilis, where there is debility from impairment of digestion and assimilation. In many of those old cases of secondary and tertiary syphilis, we find the whole vegetative system debilitated, and tonics called for to aid the reparative process.

We have not only to correct a depraved condition of the blood, but to aid the digestive and assimilative organs to elaborate healthy materials out of which to rebuild new structures, as the diseased ones are decomposed or eliminated from the system. This tonic property is not possessed by mercurials or the iodides, but is possessed by corydalis in a very sensible degree. I have often taken cases of secondary and tertiary syphilis, where the subjects were emaciated, without appetite, and with very imperfect digestion, and after the administration of corydalis for a few days, the digestion would improve, the appetite become craving, and the patient begin to gain flesh and strength, which would gradually continue until health was restored. I believe that the corydalis contains berberina, the tonic principle of berberis vulgaris, hydrastis and calumba. The dose of the tincture is from 10 to 30 drops, three times a day. I use the fluid extract in doses of from 10 to 20 drops.

COSMOLINE.

This is a purified, concentrated petroleum, or a substance that remains after all the other coloring matter and impurities are removed. It is a white, odorless, oleaginous substance, having no affinity for oxygen, and only evaporating above 400° F. It is manufactured largely.

Medical Uses. As a vehicle for other medicines for external use, it is used a good deal. When applied to the skin in urticaria, eczema, psoriasis, herpes, and other skin diseases, where the skin is dry and irritable, it is quite soothing, and aids other applications in the cure of these affections. It may be combined with various medicines to form cerates, such as arnica, calandula, carbolic acid, hamamelis and hydrastis, etc. In summer it should be combined with cocoa butter, to make it stiff enough for use, as it softens by heat. A very nice ointment of carbolic acid may be made by adding 60 grains of the acid to one ounce of cosmoline. This is a good application to old, torpid, skin diseases. Where it is too painful it may be diluted to suit the case, even one-eighth this strength. Cosmoline is a good application to burns and cuts, and with calandula with it, it will heal a cut in a few days.

DAMIANA.

Dr. J. J. Caldwell, of Baltimore, Md., introduces this plant to the profession, as an aphrodisiac, in the *Virginia Monthly*. Dr. Chas. McQuestin also commends it very highly. He says: "I have used damiana extensively in Mexico, where the Mexicans employ it as a domestic remedy; I can bear testimony to the efficacy of this plant in cases of sexual debility, or lethargy of the

sexual organs. In these cases, the results are all that could be desired." It is used in the form of an infusion of the leaves, by adding one ounce of the fresh-dried leaves to a pint of water, which may be drank in the course of the day. Perhaps a fluid extract would be preferable, the dose of which would be about one drachm, three times a day.

Dr. Caldwell gives a number of cases treated with damiana, but I do not recollect them well enough to reproduce them here. But from his testimony in regard to this plant, it must certainly be a good aphrodisiac, and worthy of more thorough investigation. I have wanted to test it in my practice, but have not been able to procure it. I am often consulted by men of all ages, who, from abuse of the sexual instinct, are impotent, and need such a remedy to restore seminal vigor; and I have often wished that we had a remedy that could be relied upon in all sexual debility. Those in use, as phosphorus and the phosphites, do not fill the bill.

ERYNGIUM AQUATICUM—WATER ERYNGO.

A fluid extract, or a saturated tincture (made as all fluid extracts and tinctures should be, out of the fresh article (the root), exerts a very positive influence over the urethra and bladder. I have used it with very positive effect in dysuria from irritation, in quite a number of cases. It is also a good remedy in spasmodic stricture; and if continued often, relieves this great trouble without other means. The fluid extract may be given in 10 or 15 drop doses every two or three hours.

The saturated tincture, made as directed for other articles, in doses of 20 to 60 drops, will prove of great value in dysuria, etc.

EUONYMUS ATROPURPUREUS—WAHOO.

Euonymus possesses marked tonic effects, stimulating digestion and assimilation. In large doses it acts as an aperient. The fluid extract or saturated tincture, in small doses, acts on the liver. I have used the fluid extract of this and the ptelia in many cases of debility with good results. During the late war I used them in remittent or intermittent fever with positive success. It is an anti-periodic, but not equal to quinia. It is a favorite remedy with me in those cases of dyspepsia, where the liver is enlarged and torpid. Combined with tonics in these cases, it is a good remedy. The dose of the fluid extract is from 20 to 30 drops.

EUPATORIUM AROMATICUM.

The fluid extract of eupatorium aromaticum or white snake-root, or the essential tincture, is a diaphoretic. It also relieves irritation of the brain, and promotes its normal action. It seems to influence the sympathetic nerves and all the organs controlled by it. The dose of the fluid extract is from 20 to 30 drops; the dose of the saturated tincture is from $\frac{1}{2}$ to 1 oz. every one or two hours.

DIASCOREA VILLOSA—(WILD YAM-COLIC ROOT)

This is an indigenous, herbaceous plant, with slender, climbing stem, rising from large, matted, knotty root-stalks. It climbs fences, bushes and logs, running some six or eight feet in length. The stem, or vine, is smooth, green, dying in the fall. The leaves are alternate mostly; sometimes nearly opposite, or in fours; more or less downy beneath, heart shaped, pointed, and nine to eleven ribbed. The flowers are of a pale, greenish-yellow color—small; the fruit is a three-angled or winged pod. The seeds are one or two to each cell, and have a small embryo in hard albumen. This plant grows in hedge and fence rows from New England to Wisconsin, and very plentiful in Georgia. The root is the part used, and should be gathered in September, and tinctured while fresh.

Medical Properties.—This plant was used by the Indians for pains in the bowels, when this country was first settled by Europeans. I have used it a great deal in bilious colic, and in colic generally of adults and children, and have always found it a trustworthy remedy in that affection. It has a direct affinity for the spinal cord and the reflex-nervous system, especially the umbilical flexus of nerves. It cures any paroxysmal pain in the bowels, as well as spasmodic affections of the bowels. The dose is from 20 to 60 drops every half hour until relief is obtained. The dioscorin is also active.

EPIGEA REPENS—(TRAILING ARBUTUS).

The epigea is a common plant in New England, growing in sandy woods or rocky soil in the shade of pines. It is a trailing plant, with rusty hairs over it. Its leaves are alternate, evergreen, reticulate, heart-shaped, and on slender petioles. The flowers are rose-colored, in small axillary clusters, appearing in early spring, even under light snow, and have a rich color.

Medical Properties.—This is an analogue of uva-ursi and eupatorium purpurium. Its specific tendency is to the urinary organs. It is a very positive remedy for dysuria, and gives much relief in cases of sand gravel, and may be alternated with carbonate of lithia, or acetate of potassium, in such cases. In strangury and dysuria it may be given with good effect. In tenesmus of the bladder it may be given, combined with eupatorium purpurium with the most prompt effect. One writer states that it is very successful in those cases of uric acid calculi, attended with bloody urine, muco-purulent sediment, and intense dysuria. He states that he has known it to bring away a copious deposit of fine, brown sand (uric acid), after the patient had taken ten drops of the tincture six times a day. I have produced the same result in several instances, by giving this remedy in alternation with the carbonate of potassium. The dose of the tincture is 30 to 60 drops.

**EUPHORBIA—BOWMAN'S ROOT—BLOOMING SPURGE—
—EUPHORBIA COROLLATA—WILD IPECAC—LARGE,
FLOWERING SPURGE—MILK WEED—FLUID EX-
TRACT AND ESSENTIAL TINCTURE.**

This is another remedy, that, from having been mostly used in the form of an effusion, has never been properly appreciated by the medical profession. The euphorbia corollata exercises a very special influence upon mucous tissues, relieving irritation, and promoting the activity of that part of the system. It has special influence over the digestive organs. In small doses of the fluid extract, say 5 to 10 drops every three hours, it improves digestion, and tends to overcome constipation by its influence over the peristaltic action. It may be used, like ipecac, in cases of chronic diarrhœa, and chronic inflammation of the mucous membrane of the bowels. In large doses it proves emetic or cathartic; but, short of either, it seems to act well on the kidneys, and aids to cure dropsy; even hydrothorax and ascites have been cured by it. The dose of the fluid extract, when properly prepared, is from 5 to 10 drops. This article resembles in property the Indian physic—the gillenia trifoliata or stipolacca; this, like the above, and ipecac, in large doses, is a speedy and safe emetic, but in smaller doses it is a very remarkable tonic upon the stomach, liver and bowels. It acts well on the liver, and soon overcomes constipation. The dose of the essential tincture, or fluid extract, is from 1 to 15 drops; medium dose, 5 drops.

ERIGERON—FLEABANE AND ERECTHITES—FIREWEED

These two plants, though very distinct, are generally confounded by druggists. They have near the same taste and smell, and consequently it is quite easy to mistake the one for the other. The erigeron philadelphicum is a perennial herb; the other species are annuals, and so is fireweed. The oils of the fireweed and three species of the fleabane, are all used in hemorrhages of a passive character. I have used these oils in hemorrhages for several years, especially hemorrhages of the uterus, and have found them very active. I was led to use them from witnessing the good effect in the case of a lady who had suffered for several years with menorrhagia, and at last had an attack in which all the usual remedies failed to check, and she was induced to try the erigeron in the form of an infusion (for that was before the oil was manufactured). She did so, and it very promptly checked the hemorrhage. This induced me to try it in my practice, which I did, and I found it a very positive remedy. I have used the oil of fireweed in the form of a tincture, 1 oz. to 7 oz. of alcohol, in doses of 10 or 15 drops, in passive hemorrhages, giving it every hour or two, according to the urgency of the symptoms. And I do not see that

there is material difference in the action of the oil of fleabane and that of the erechthites. They are also valuable in the treatment of hemorrhoids applied in the form of an ointment—I oz. to 1 dr. of cocoa butter. The dose of these oils is 1 to 5 drops. One or two drops seems to be sufficient.

EUPATORIUM PURPURIMUM—QUEEN OF THE MEADOW.

This plant, growing everywhere in the meadows of Georgia and some other States, is one of the most powerful and certain diuretics that we have. The fluid extract is a good preparation; and may be used in doses of one or two drachms every two or three hours, until it acts freely upon the kidneys. I have been using the tincture, made by covering the fresh roots, crushed, in spirits of nitre, which makes an admirable diuretic in dropsy. It may be given in doses of 2 or 3 drachms every one or two hours. I have treated a great many cases of dropsy this season; and have generally used the tincture of eupatorium purpurium, made as above, combined or alternated with the tinctures of digitalis and apocynum, C. This combination, with an occasional hydragogue cathartic, acted with great promptitude and certainty. The eupatorium purpurium has a good effect upon the urinary organs in a state of irritation and slight inflammation. In calculous diseases, if the calculi are small enough to pass, this article, in large doses, so increases the volume of urine, and so dilates the urethra, as frequently to cause the expulsion of the calculi, which has led to the idea that it will dissolve the calculi, and has given it the name of gravel-weed.

It should be made from the fresh root, as it contains a volatile oil, upon which its virtue depends.

EUPATORIUM TENCRIFOLIUM—WILD HOARHOUND.

The fluid extract of wild hoarhound also stimulates all the functions controlled by the sympathetic nervous system, improving digestion and assimilation, and it increases waste and excretion. It, then, is alterative and tonic. Combined with other tonics, as hydrastis, ginseng and calumba, it becomes a valuable remedy in many cases of debility and depraved conditions of the system. Combined with the hypophosphites and iron, it will exert an active, restorative influence in debility, or in tuberculous phthisis. The dose of the fluid extract is from 20 to 40 drops; the dose of the essential tincture, made by covering the fresh plant in diluted alcohol, is from 30 to 60 drops. In large doses, it is a very powerful diaphoretic, and useful in catarrh, and pleuritis, and pneumonia or bronchitis.

EUCALYPTUS GLOBULUS—AUSTRALIAN GUM TREE— FEVER TREE.

Eucalyptus belongs to the natural order, myrtaceæ. There are over a hundred species in this genus, of which this is the largest; it often grows to an enormous size. It has a green leaf, on a short stem; they are thick and leathery, and shaped inequilateral; they are marked with a nervule through the center, shaped like a spear, and curved like a scythe-blade. It is a native of Australia. It is believed that the cultivation of this tree in malarious districts will prevent periodical diseases. It is also stated that infusoria, bacteria, and cryptogamic organisms are destroyed by the addition of an infusion of eucalyptus. I have never tried it.

Medical Uses.—It is found to cure chills when quinia has failed. It is also highly praised in lung affections, as bronchitis and phthisis-pulmonalis. It has proven a valuable disinfectant and antiseptic to old, foul and gangrenous ulcers; arresting the gangrene, and disposing the ulcer to heal. It likewise is a valuable remedy in cardiac asthma, readily allaying the dyspnœa that attends it. In leucorrhœa, with a discharge of an acrid mucous, it is a good remedy, both locally and internally used. It is also a positive remedy in chronic diarrhœa and typhoid dysentery. In old cases of chronic catarrh, where the discharge is acrid and foetid, eucalyptus used by inhalation or with the douche, and taken internally, cures this disease with great certainty. The dose is $\frac{1}{2}$ to 1 oz. of the tincture. I have used it as a disinfectant with flattering success.

EUPATOIDIN.

Eupatoidin is an extract of the *eupatorium-agertoides*. It is a diaphoretic, anti-spasmodic, tonic, diuretic, and somewhat nervine and expectorant. This remedy has not been sufficiently investigated, but from the trials that have been already made, it doubtless will prove a very valuable nervine-tonic and anti-spasmodic; peculiarly adapted to those cases of irritability of the nervous system that are connected with prostration, such, for instance, as hysteria, chorea, tremors, convulsions, subsultus tendinum, restlessness and morbid watchfulness, etc. In such cases, it may be combined with cypripedin and scutelasin. As a diaphoretic, it may be combined with asclepidin, and given in low forms of fever, or any of those diseases where it is desirable to determine to the surface. As a mild expectorant, it may be combined with sanguinaria, and given in pneumonia, bronchitis, trachitis, and wherever an expectorant is desired. This plant is very nearly allied to *eupatorium aromaticum*, and may be used in its stead, and is more active and certain. The eupatoidin is manufactured by H. M. Merrill & Co., of Cincinnati, Ohio, and although not thoroughly tested, as yet, bids fair to become quite an addition to our list of concentrated remedies. The dose is from $\frac{1}{2}$ to 2 grs., repeated every two or three hours.

ELDER—DWARF—ARABIA HISPIDA.

The dwarf elder is a low, bushy shrub, growing in fence corners, hedges, uncultivated fields, etc., in many parts of the United States, flowering from June to September. The whole plant is medical, but the bark of the root is the most active.

Medical Uses.—This is an old remedy, but it is not as much used as its merits deserve; hence, I introduce it, as I have some other neglected remedies, to call attention to it. It is one of our most active diuretics in dropsy, especially in anasarca and ascites. I was convinced of its superior power in dropsy some years ago, by using a strong gin-tincture in an extreme case of anasarca. The case was an old colored man, sent to me from an adjoining county to be treated for dropsy. He had bled profusely from the nose for some time, at stated intervals, and from the exhausting effects of the epistaxis, dropsy ensued. I made him a very strong tincture of the Arabia bark and the eupatorium, and directed him to take it as freely as possible without producing an emetic or purgative effect. After using it a few hours, the kidneys began to act so profusely, that it alarmed him, and he called my attention to the fact, and I directed him to continue it, which he did; and in a few days the blood was so suddenly deprived of its superabundant watery elements that the skin was in distinct wrinkles all over the surface of the body. I now put him upon tonics and iron, and he was soon restored to his usual health. It not only augments the flow of the urine powerfully, but at the same time promotes absorption, and like pipsissawa and eupatorium, it tends directly to cure the disease. The common elder (*ambucus canadensis*) has a similar effect, but is more liable to purge and vomit than the *Arabia hispida*, yet it is an active diuretic. When I commenced the practice of medicine, dropsy was the "*opprobrium medicarum*." Diuretics were then in use that could unload the cavities and cellular tissue of the superabundance of serum, but the disease would return. The disease is not simply a want of activity in the kidneys, but there is an equilibrium between the absorbents and exhalents, between endosmosis and exosmosis, whereby the cavities and cellular membranes become loaded with serum; and the mere increase of the action of the kidneys does not always overcome the evil, but we must give remedies that have the power to restore the lost equilibrium between the exhalents and absorbents. The dose of the tincture is from $\frac{1}{2}$ to 1 oz. every hour or two until it acts freely on the kidneys.

ERIODYCTION GLUTINOSIUM—YERBA-SANTA.

This plant was introduced to the profession by Dr. Bundy, of Colusa, Cal., as a remedy for bronchial irritations and chronic inflammation of the air passages generally. Dr. Bundy says:

"I am so satisfied and pleased with this remedy, that I cannot refrain from making it known to the profession." I have seen several statements of others that go to confirm the opinion expressed by Dr. Bundy. It is a native of California, and is found principally in the East Range Mountains. The plant is somewhat branching, and grows to the height of two to four feet. The leaves are petiolate, finely serrated and oblong, dark green above, and has a gum resin on them, which gives them the appearance of being varnished; the underside of the leaf presents a silvery appearance. The leaf is the part used, which contains a large per cent. of this gum resin, in which its medical virtues probably lie. It may be given in syrup of acacia or glycerine. Dr. Bundy reports several cases of laryngitis and bronchitis, of long standing, that were cured by the tincture of this plant. He also reports several severe cases of hemorrhoids, of long standing, cured in a short time, by teaspoonful doses of the saturated tincture, three times a day. In coughs, he usually gave 30 drops, in simple syrup, three or four times a day. This plant is worthy of a trial, and I am now testing it, and in some cases it has seemed to do much good.

GOLD—THE CHLORIDE AS A MEDICINE.

THIS IS TREATED OF IN OTHER WORKS.

Although the chloride of gold does not belong to the vegetable materia medica, yet as it has been used as a medicine, it may be proper to give it a passing notice. As an alterative, some writers speak in high terms of the chloride of gold in primary syphilis, and recommended it also in the secondary stage. It is also recommended in other discrasias, as scrofula, and also in cancer. Those who advocate its use say that, while it is positive in its alterative effects, yet it is free from all deleterious properties. It produces constitutional changes in the system, combining with *materis morbi*, and then with the poisonous material thus liberated, it is eliminated through the kidneys, leaving no evil results from its influence. Some writers say that it is endowed with the specific property of combining with the effete and noxious materials that are toxic to molecular life, and having strong affinity for all such poisonous elements, it, with those poisons, is easily conveyed out of the system. If these statements be true, it is of high importance to the therapist, and should be thoroughly tested, and if found what it is represented, should take the place of those more dangerous chemicals, as mercury. I cannot indorse all the high encomiums bestowed upon this article, as I have not, as yet, used it much. It is said to stimulate the glandular system most powerfully. The dose is one-twentieth to one-thirtieth of a grain three times a day. It is best triturated, 1 grain to 1 of sugar of milk.

GALIUM APARINE—CLEAVERS—GOOSE GRASS.

This singular plant possesses active diuretic powers. It has been used domestically in calculi of the bladder and kidneys, and many people believe that it is a real solvent of stone in the bladder. However this may be, it is certain that it will allay strangury, often mistaken by the people for calculous disease. It is especially useful also in aphthæ, from a scorbutic state of the system. It relieves dysury and suppression of urine in young children very promptly. It is also a very positive remedy in strangury of women from uterine disorders, hemorrhoids or irritable bladder. It is also a great relief to strangury, associated with prastatic disease of old men. The *gallium asprellum*, perhaps, has the same effect as the *aparine*. The cold infusion, or the expressed juice preserved in spirits of nitre, is the best form for use, as boiling dispels its medical virtues. I like the expressed juice preserved in spirits of nitre, the dose of which would be from 1 to 2 ounces every two or three hours. There is a case of a lady reported who had a modulated tumor of the tongue, apparently of a cancerous nature, cured by this remedy, taken internally, and used as a local wash to the tumor. In very large quantities the *gallium* is an active diuretic, and may be used as such in the active forms of dropsy, but not in atonic conditions of the system, as it is debilitating.

GOLD THREAD—COPTIS TRIFOLIA—MOUTH ROOT.

This little plant has round, slender stems, invested with ovate, acuminate, yellowish scales at the base. Its leaves are evergreen, on long, slender petioles; the leaflets roundish, acute at the base, small and smooth, veiny and sessile, they resemble the common parsley. The flowers are small and white. The fruit is an oblong capsule, containing many small, black seeds. The root is the part used, which is golden yellow and very bitter; it is long and slender. It grows to the height of one or two feet in swamps, along streams in many parts of the United States, plentiful in Georgia.

Medical Uses.—This is another valuable remedy that has been neglected by the profession. It doubtless contains a large per cent. of berberina, which abounds also in *hydrastis canadensis*, *berberis vulgaris*, and in some other plants; and this is its principal tonic property. It has no astringency, but is a pure, bitter tonic of the highest power, and applicable in all cases of imperfect digestion and debility. It has long been used by the common people as a gargle in aphthous affections of the mouth and throat, and is decidedly efficacious in such conditions in the form of infusion. In old cases of dyspepsia, connected with chronic inflammation, like its analogue, golden seal, it is very positive in its effects. The dose of the tincture is 1 to 2 ounces.

EUNONYMUS ATROPURPUREUS—WAHOO—INDIAN ARROW WOOD, BURNING BUSH, ETC.

The eunonymus is a small shrub, with smooth branches, growing from five to ten feet high. There is also another species, smaller than this one, to-wit: the eunonymus americanus, which has four-angled branches. They both grow in many parts of the United States, in woods, thickets, and along river bottoms, flowering in June. The flowers of the eunonymus atropurpureus are of a dark purple color, inclosed in a crimson, five-angled pod; the eunonymus americanus has yellow and pink flowers, in a dark-red pod, rough, warty and depressed; they are both ornamental in autumn. The bark is used, which is bitter, and rather pungent to the taste.

Medical Properties.—It was once used a good deal in remittent fever, but its antiperiodic powers are not remarkable, but its tonic powers will adapt it to old cases of relapsing ague. I have often treated such cases with the eunonymus atropurpureus and ptelia, with perfect success. In large doses, it causes watery and bilious stools, and will cause diarrhœa if continued in large doses. The eunonymin, made from the eunonymus atropurpureus, is a fine liver remedy. This is one of the remedies tested recently by Prof. Rutherford and M. Vignall, upon the liver; and they found this, like podophyllin, sanguinaria, ipicac, colocynth and leptandrin, to act forcibly on the liver. I use the eunonymin in biliary obstructions with positive results. The dose of the tincture is 30 drops; the dose of eunonymin is 1 gr.

EPILOBIAM PALUSTRE.

The epilobiam is a mild astringent and tonic. It has a specific affinity for the mucous membrane, especially those of the bowels. It possesses more curative power than ordinary astringents, and hence, is very successfully given in chronic diarrhœa, often curing that disease after all other remedies have failed. This success attending it is doubtless owing to a peculiarly soothing and tonic effect that it exerts over the mucous surface, not possessed by other astringents. It has the power, also, to quiet irritation of the bowels; and on that account, it is a valuable remedy in the latter stages of dysentery, after the inflammatory stage has passed off, and still a state of erethism of the mucous surface remaining, here the epilobiam will have a fine effect. It is a valuable remedy in summer complaint of children, and for diarrhœa, consequent upon dentition, in which case it should be alternated with the phosphites, say, small doses of the hyperphosphate of lime. This course is much more successful than the old plan of giving opiates and astringents, or the chalk mixtures. The saturated tincture, made like other essential tinctures, by adding 8 ounces of the herb to alcohol 1 pint. The dose is 1 to 2 ounces for an adult; for children, according to age, from 5 to 20 gtts.

GELSEMINUM SEMPERVIRENS—YELLOW JASSAMINE.

Yellow jessamine is an indigeneous evergreen vine, climbing large trees in river swamps, and in glades and about flat rocks, all over Georgia, and in some other southern states. It is often cultivated as an ornamental plant about yards and gardens. Its leaves are opposite, perennial, lanceolate, entire, dark green above, pale beneath, standing on short petioles. Its flowers are yellow, having a narcotic, but rather agreeable odor, standing on axillary peduncles; the calyx is very small, with five sepals; the corolla is funnel-shaped, with a spreading border and five tubes nearly equal; stamens, five; pistils, two; capsules, two-celled, compressed, flat, two-parted; seeds, flat and attached to the margins of the valves. Its fruit is a black berry. The root is the part used; it is long, and of a bitter taste.

Medical Properties.—In over doses, gelseminum will produce general prostration of all the voluntary muscles intact, until very large doses are taken, then the involuntary muscles are also paralyzed. It produces dimness of sight and paralysis of the upper eyelid before it produces any fatal effect upon the involuntary muscles. The spincter muscles are first affected, then the respiratory, and finally those of the heart. The remedy for an over-dose is galvanism and stimulants, freely used. Gelseminum has a specific affinity for the motor side of the spinal cord, the brain and mucous membranes. It does not affect the sensory nerves like aconite. It affects the nerves of motion, and produces death, in toxical doses, by passive apoplexy-paralysis. It is a valuable antispasmodic, and is a remedy in hysteria, chorea, tetanus, puerperal spasms, spincter muscles, etc. It has been regarded as an arterial sedative, but recent experiments would seem to lead to doubt in regard to its control over the heart in medical doses, yet it has a good effect in some local inflammations, as in dysentery, hyperesthesia, and neuralgia, also in catarrh and other mucous inflammations, as in gonorrhœa and leucorrhœa. In epidemic influenza at any season of the year, gelseminum is a specific, if given early in the attack. It aids in procuring an intermission in periodical fevers where the pulse is full, large and quick and soft, but it does not possess any further febrifuge powers that I can discover. It is a valuable remedy in headache when it is preceded by heaviness, vertigo, bright redness of the face, but dull, heavy expression, with full pulse, also, in neuralgic headache. It is also a good remedy in amaurosis and sclerotis. It is a valuable remedy for stricture of the urethra. The usual dose of that tincture is 20 to 30 drops.

GUARANA—PAULLINIA SORBILIS.

This is from the seed of a climbing plant of South America. The name "Guarana" is derived from the name of a tribe of Indians, by whom this remedy was first used as a condiment. It

is made from the seeds of the *paullinia sorbilis*, and possesses a principle very nearly allied to the thein in tea, or caffen in coffee; but other principles quite different in their action from either thein or caffen.

Medical Uses.—Guarana acts specifically upon the sympathetic nervous system as a sedative, resembling, in its effects, valerian, scutillaria, cyripedium, pulsatilla, and the bromides. It also has some of the effects of *diascoria vil.* and *iris versicolor*. It was first introduced as a remedy for migraine, sick headache and neuralgia. It is peculiarly suited to cases of nervous headache of persons who have used tea or coffee to excess, or those who are dyspeptic. I have used it in sick or nervous headache, in my own person, and find that moderate doses, like coffee, relieves it, but large quantities increase it. I use the saturated tincture in doses of 20 to 30 drops every hour until it relieves. Its value, however, is not confined to nervous headache, but it displays valuable power over other irritations of the great sympathetic system, in controlling some very grave diseases of those parts largely supplied by this great trunk of nerves. It has remarkable power over diarrhœa and summer complaint of children, and the diarrhœa of phthisis. It also controls excessive vomiting in diarrhœa from teething or from improper food. It has proved a very prompt remedy in chronic diarrhœa, from irritation of the sympathetic system. The dose for children, ranges from 10 to 20 drops of the fluid extract, and 20 to 30 of the saturated tincture, age, etc. Its direct action upon the nerve centers, and upon the brain and spinal cord, sympathetic, and the pneumogastric nerves, renders large doses injurious rather than beneficial; instances are on record where it produced a fit of asthma in persons subject to that disease. This is from its stimulating effects upon the nerve centers and brain: in this particular it is like other stimulants, not to be used where there is plethora, or determination to the brain, but use belladonna and gelseminum. It is, however, indicated in headache, attended with enfeebled circulation, want of stimulus, and will always act promptly under such conditions. It has been used in too large doses in headache; from 5 to 10 drops of a saturated tincture is sufficient in most cases, and it may be repeated every hour until it gives relief. There are some very favorable reports of its use in inflammatory rheumatism. In the reports of the *Irish Hospital Gazette*, the case of E. A. Rawson, suffering from severe lumbago, was relieved by taking 15 grs. of the powder in hot water, which relief lasted for 24 hours; it then returned, and he was again relieved by another dose: he then gradually increased the dose up to 40 grs., and took it once a day for a week, when the disease disappeared. He states that he has used it in many other cases, and finds that when the lumbago comes on with sharp, stinging pains (*neuralgia*), guarana acts like magic, but when the pain is dull, the guarana is slow to relieve. It seems that whenever the fibrinous envelops of

nerves, the aponeurotic sheath of muscles, the facia or tendons, are the parts affected, this remedy gives relief. It is a valuable addition to our list of neurotic remedies, if used according to indications.

GRINDLIA ROBUSTA.

This is an herbaceous plant, perennial, found on the west coast of America; it flourishes best between the 28th and 52d degrees of north latitude. It varies in height from a few inches to two or three feet; usually, as found upon elevated localities, it is about eighteen inches in height. It has some general resemblance to our common sun-flower, and hence, called the wild sun-flower by the people. Dr. J. G. Steele, a chemist, called attention to it as a remedy for the poison of the rhus toxicodendron. Dr. W. P. Gibbons has also called attention to it as a remedy in asthma. He states, however, that it did not prove valuable for the rhus poisoning, but says it is a good dressing to vesicated surfaces, as burns, etc. He uses the fresh herb bruised, and applied over the burn frequently. He also recommends it very highly in uterine catarrh, or catarrh of the urinary organs generally, used as a wash, say one part of tincture to three or four parts of water, used three times a day. "But," says he, "it is in iritis that its greatest victories are won, no matter much what the cause, whether gout, rheumatism, scrofula or violence. It seems, in its effects on the diseased iris, to be almost a specific." He cites the case of a man whose eye was much swollen and protruding, the iris very much contracted and irregular on its edges, attended with intense pain through the entire ball. The conjunctiva was highly congested, every vessel being distended with blood. He subjected him to a mercurial course, applied leeches, employed the usual cooling lotions to his eyes, without benefit. He then put a tablespoonful of Steet's fluid extract to about four of water, and applied, which produced an immediate change for the better. The next day, as the patient had asthma also, he gave him the fluid extract internally, which, he says, soon relieved both troubles. He cites another case, which was one of an injury of the iris, resulting in iritis. In this case, he used the tincture, diluted, to the eye, and gave it internally at the same time, and he says it relieved him in a few days. Others report favorably of it in asthma and chronic bronchitis. I see one report where it is highly praised in ulceration of the os and cervix uteri, used one part tincture to ten of water, applied through the speculum on lint. In the *Pacific Medical and Surgical Journal* there are some favorable reports of its use. I see some cases of old sores, that had resisted all other remedies, which were healed by the internal and external use of the grindlia robusta. There are some favorable reports of its use, in ten drop doses, in asthma, and doubtless it will prove a good remedy, both for asthma and chronic bronchitis. I am testing it, and will report in the journals as soon as I try it fairly.

GYMNOCLADUS CANADENSIS—AMERICAN COFFEE TREE.

This is a large tree, with rough bark and but few stout branches ; leaves, unequally bipinnate ; flowers, in axillary racemes ; petals, white ; legumes, six to ten inches long and nearly two inches broad, a little curved, and of a brown color ; seeds, more than half an inch in diameter. It grows in Kentucky and in Western woods to the height of fifty or sixty feet, having a few long branches near the top. It bears an abundance of large pods, containing from two to four seeds about the size of a walnut.

Medical Properties.—This tree belongs to the leguminosae. In its effects it resembles baptisia and robina. It has not been much used, but the limited trials with it prove it to be an active agent. It produces, in over doses, headache, fullness over the eyes, a scraping, burning sensation in the throat, a sensation of fullness and nausea, pain in the lower parts of the abdomen, and in the back, and a tickling cough generally. It has been used with good effect in sore throat, or tonsillitis. It is a good remedy in erysipelas of the face, and in scarlet fever. In all cases of a typhoid character, or of an erysipelatous character, it will be found to act promptly. A saturated tincture may be made by adding 8 dr. of the ground seeds to 1 pt. of (76°) alcohol. Dose $\frac{1}{4}$ to 1 gtt. three times a day. It should never be given in large doses, as it then produces its toxical effects.

GOSSYPIUM HERBACEUM—COTTON ROOT.

This plant is too well known to require any description. The root is the part used, and should be made from the bark of the root, gathered at the maturity of the fruit, just before it opens, and made into a fluid extract, or hydro-alcoholic tincture while fresh, as it loses its medical properties by drying, and this is why so many have failed with it.

Medical Effects.—The medical effects of the cotton plant was found out by the slave women of the South, who used it for criminal purposes, to prevent their offspring. And however many physicians have failed with it, when gathered at the proper season, and properly made, it does act vigorously upon the nerves of the uterus : this I have tested in a great many cases. I have used the strong infusion, or the aqueous extract, preserved in a small quantity of alcohol, most generally in my practice, and have often succeeded with it where ergot had failed. Soon after its effects were found out, I had some cases of obstetrics in which the fetuses were dead, and the labor very tardy on that account ; and in several of that kind, after trying the ergot, and failing with it, I succeeded in rendering the pains vigorous in a few hours with the infusion of the cotton root. It is also valuable in dysmenorrhœa. The dose of the infusion 1 to 2 dr. ; the tincture 1 to 2 oz.

HELONIAS DIOICA—FALSE UNICORN ROOT—STAR-GRASS.

Wildenow and Gray called this plant the *chamœlirium lutum*; Linnæus called it the *veratrum lutum*; Walter called it the *melantheum dioicum*; Pursh called it *helonias dioica*, which name it still retains: it is often confounded with the *aletris farinosi*, which it resembles (for plates and botanical differences of the two plants, see the author's epitome of "*New Materia Medica and Therapeutics*"), but the properties are quite different. They are both called by the same common names—that is, "Stargrass, devil's bit, starwort," etc. The *helonias dioica* is an herbaceous perennial, with large, bulbous, premorse root, from which arises a simple, smooth, somewhat angular stem or scape, one or two feet high. The cauline leaves are lanceolate, acute, small, and at some distance from each other, without petioles; the radical leaves are broader, some four to eight inches long, by one-half to one inch wide, narrow at the base, and formed into a whorl at the base of the scape. The flowers are small, very numerous, and of a greenish-white color, and are in long, terminal, spicate, nodding dioecious racemes, like a plume. The fruit is a capsule, with many seeds in each cell, which are acutely compressed.

Medical Effects.—In very large doses it produces emeto-catharsis, with burning and griping in the stomach and bowels, with a free flow of saliva. It has an affinity for the genito-urinary organs; and in large doses, it not only irritates the stomach and bowels, but also the kidneys and urethra, which shows its specific tendency to these organs. And in addition to the above specific affinities, it acts on the assimilating and digestive apparatus similar to the hypophosphites and phosphoric acid. And is an active agent in correcting that abnormal condition upon which diabetes and albuminuria depend. It acts like iron in anæmia and chlorosis, and may be alternated with it. It has quite a curative effect in some cases of dropsy depending upon exhaustion, by long continued attacks of disease. It imparts tone to the muscular fiber, similar to *nuxvomica*; and I have often derived much advantage from it in the treatment of prolapsus of the uterus. It has an affinity for the gastric glands, as well as the salivary glands, and is of much utility in the treatment of dyspepsia, where there is a deficiency of gastric secretion from debility. It increases the activity also of the ovaries, testicles and glands of the curvix uteri and vagina. It gives tone to the urinary and generative organs, and thereby assists us in the cure of many diseases of these organs. I have often witnessed its curative effects in diabetes; and I am now treating a very obstinate case of diabetes with it, and the *lycopus* alternated, and it is improving very rapidly. It has cured many cases of albuminuria, as well as many of diabetes; in the latter disease, I alternate it with nitrate of uranium and *lycopus*. It has long been used by the people

(and they learned it from the aborigines) in certain affections, such as depend upon an atonic condition of the organs of reproduction. It increases the tone and the physiological activity of the generative organs. Prof. Lee says: "Numerous trials have convinced me that helonias has specific action on the uterine organs—an alterative, regulating influence over their functions." It is of much service in leucorrhœa of an atonic character, attended with anæmia. I have often given it in cases of habitual miscarriage, with other remedies of its class, and have frequently broken up this morbid habit. In sterility and impotence, it is regarded as a very valuable remedy; and it undoubtedly exalts the state of the sexual organs, and thereby improves their functions in a direct manner. It stimulates certain glands; and upon this affinity for glandular structures depends its direct influence over the ovaries and testicles in sterility and impotence. This is not a new remedy, but one too much neglected, hence I call attention to it. The dose of the tincture is 20 to 30 drops.

HAMAMELIS VIRGINICA—WITCH HAZEL—WINTER-BLOOM, SNAPPING-HAZEL NUT, SPOTTED ALDER, ETC.

This is an indigenous shrub, having crooked, branching trunks, from one to two inches in diameter, and from ten to twelve feet high, with a smooth, gray bark, rather spotted. It resembles the edible hazel-nut, but is larger, and the nut is much smaller and harder. It grows in many parts of the United States, in damp woods, near streams, flowering from September to November, and maturing its seeds the following summer. The bark and leaves are used.

Medical Properties.—This article has a direct affinity for the venous system of blood vessels. It acts upon the venous system in a similar way to that of aconite upon the arterial system. It has a direct action upon the vaso-motor nerves, which supply the venous system. It is a remedy even in phlebitis, in which case, it should be given in small doses, say 3 to 5 drops, every two hours, of the tincture, or 2 or 3 drops of the fluid extract. It is a positive remedy in varicose veins, and in varicose ulcers, and all diseases depending upon obstruction of the venous circulation, such as hemorrhoids, some passive hemorrhages, plegmasia alba dolens. In varicose veins of the leg, it should be used both internally and locally. In bleeding piles, it should be also used locally and internally. It is often very prompt to relieve epistaxis, given internally in small doses. It is a very positive remedy for congestion of the eyes, or chronic scleritis.

The hamamelis virginica is one of our best astringents, and seems to have an effect upon the capillary vessels that is not possessed by other astringents. The fluid extract is the best

preparation, and the distilled extract, by Pond, is the best. I have used the saturated tincture, made by covering the fresh leaves in alcohol (50°), and steeping ten days, and pressing out the tincture. This answers as an external application. In leucorrhœa, order a strong tea of the fresh leaves, and used as an injection, three or four times a day. In hemorrhoids, Pond's extract taken internally, and used locally upon the humors, and alternated with the persulphate of iron, will often cure recent hemorrhoids. The hamamelis acts as a tonic to the venous circulation, and this property renders it a remedy in many diseases where venous circulation is enfeebled or sluggish. In catarrh and ozœna, pharyngitis, tonsillitis and chronic laryngitis, it will be found a valuable remedy. In many diseases, where the venous circulation is sluggish, the mucous membranes thickened, the secretions being very much increased, or where there is a mucopurulent discharge, the hamamelis will be a good remedy. The dose of the extract is from 3 to 6 drops, according to the purpose for which it is used; ordinarily, 10 or 15 drops is a dose.

HYDRASTIS CANADENSIS—GOLDEN SEAL—YELLOW PUCCOON ROOT.

Hydrastis canadensis is an indigenous plant growing in shady woods, rich soil and damp localities, in many parts of the United States. It has a simple, erect stem, herbaceous, round, from six to twelve inches high, bearing two unequal, terminal leaves, which are alternate, palmate, having from three to five lobes, hairy, cordate at the base, of a dark-green color, some four to nine inches wide. The flower is solitary, small, white, or rose-colored, and the fruit resembles a raspberry, red, and consists of many two-seeded drupes. It flowers in May. The root is the part used; it is of yellow color.

Medical Properties.—The medical properties of this plant have never been fully appreciated, from the fact that it has been used in the form of a tincture in alcohol, which does not dissolve the alkaloid-berberina; upon this, the medical virtues of this plant, as well as that of *calumba* and *berberis vulgaris*, depend. Some five years ago, I was consulted by a young married gentleman, for a small babe, some few months old, which had to be fed by the bottle, and as they gave it cow's milk, without dilution, it became dyspeptic, and vomited up all or nearly all of its food, and finally took colliquative diarrhœa; from which condition, it became prostrated, and the father had given it various tonics (for he was a physician), but to no purpose, as it continued to decline, and looked like that nothing could save it from an inevitable death. I knew that it could not bear tonics with alcohol in them, so I made me a preparation, with a few ounces of the ground root of *hydrastis*, and percolated alcohol, water and glycerine, equal parts,

through the powder, two or three times; of this, I ordered the child to have 10 or 15 drops, every two or three hours through the day, and it acted like a charm; the child began to retain its food, and daily gain flesh, and the diarrhœa was soon arrested, and thus its health was restored in a few weeks. This experiment proving so positive, I have been using an extract similarly prepared, ever since, and find it a charming remedy in all gastric debility. And thus prepared, we have no tonic so suitable to atonic dyspepsia, with chronic gastritis, as this one. It is positive in its action. I have used it frequently where calumba, gentian, and other tonics had failed, and it would relieve the gastric debility in a short time. It is a tonic to mucous surfaces. And an aqueous extract is a good application to the eyes in scleritis of an atonic character, and the muriate of hydrastin is a good wash for indolent ulcers, and as an injection for gonorrhœa, in the second stage, after the inflammatory stage has passed off. Soon after this, I was called upon to visit Mrs. K., a lady on a visit among her relatives at Monroe, Ga., and was taken sick with violent menorrhagia, and so reduced before her physicians could check it, that it resulted in a very grave form of indigestion, for which her physicians had given her strychnia, subnitrate of bismuth, and various other tonics; but her digestion continued to become more feeble, until she was finally unable to digest enough of the most digestible articles of diet to support life; and her friends knowing that she must soon succumb to the disease unless there could be a remedy found, concluded to have consultation, to which her attending physician was opposed; nevertheless, they called me in without informing me of the fact, and I met him, but being offended with the family, he withdrew from the case. So I put her on the glycerate of hydrastis and chelonin, as her liver was very torpid, with the utmost debility of the stomach. I gave her the above preparation, in doses of about one teaspoonful three or four times a day, and in a few days the vomiting ceased, and digestion began to improve, and in a few weeks she was able to ride out in her carriage. She continued to improve, and in a few months was restored to health. And this is one out of many cases that I have treated with like success with this best of tonics. Drs. Barton and Tully both recommended this article very highly; yet it seems that but very few physicians are acquainted with its superior virtues. It not only stimulates the gastric glands, and thereby increases the powers of the stomach, but it also acts upon the liver and pancreas, and also assists the assimilative organs, by which the blood is enriched, and hence, the nutrition of every part is increased. It acts directly also on the glandular system, and upon the mucous tissues, liver, and upon the muscular system, for it has often cured neuralgia. In chronic otorrhœa, chronic conjunctivitis, old nasal catarrhs, œzena, with purulent discharge, catarrh of the stomach (one of the commonest causes of dyspepsia), catarrh of the gall bladder (that so often leads to

jaundice), intestinal catarrhs, causing diarrhœa and dysentery, catarrh of the bladder, gonorrhœa, gleet and leucorrhœa, which are forms also of catarrh, are influenced in a very marked manner by *hydrastis canadensis*. As a lotion for topical use, and infusion of 30 or 60 grains of the pulverized root to the pint of water will answer. The dose of the crude powder is from 5 to 20 grains; of the fluid extract $\frac{1}{2}$ to 1 drachm; the tincture, made as above directed, the dose is 1 to 2 drachms; the dose of the hydrastin is $\frac{1}{2}$ to 1 gr.

HYPOPHOSPHITES.

The hypophosphites were introduced to the profession some ten or twelve years ago, by Prof. Churchill. And he believed that they were specific against tubercular diseases; but they did not prove all that he anticipated, yet they have proved of much value in the treatment of many diseases.

HYPOPHOSPHITE OF LIME.

In large quantities, the hypophosphites cause an increased nervous power, and with that, an increase of strength, a state of plethora; but if continued too long, this leads to hemorrhages, consequently, this remedy may be abused. There can be no doubt that the moderate use of this remedy in the forming stage of phthisis is an advantage, as it will improve the tone of the nervous system, and thereby stimulate the blood-making organs, which gives at once a more active vitality to the whole system. Not only are the hypophosphites an advantage in the treatment of phthisis pulmonalis, but they are active remedies in the cure of scrofulous diseases—another type of tuberculosis. This condition is manifested in children at an early age, by an overgrown head, open fontanels, the distended abdomen and swelling of the lymphatic glands, and sometimes a great tendency to catarrhs, abscesses, brain diseases, and eruptions upon the head and ears, etc. It is a very positive remedy in the incipient stage of tuberculous affections of the meninges of the brain. In mesenteric disease—marasmus of young children—there is no better remedy than hypophosphite of lime, given in small doses; if there is anæmia, with marasmus, the phosphite of iron may be added, or alternated with it. And if the digestive organs are feeble, *helonias dioica* may be given at the same time. It is also of great value in that debilitated condition that follows exhausting discharges of blood, semen, mucous or pus. It is not uncommon to find great prostration of the nervous system in masturbators. The victims of this abominable vice so exhaust the nerve centers that it is impossible to improve their condition otherwise than by supplying the brain with its wanted material—phosphorus—and this cannot be done more directly than by giving the hypophosphites, which are readily decomposed in the system, and the phosphorus

appropriated to the supply of brain material. Also in caries of the bones, spinal curvature, rachitis in strumous habits, this remedy is well adapted to the wants of the system in these abnormal conditions. Likewise, in feeble children, where the process of teething is tardy, this remedy is indicated, and will always do good service. The dose for adults is from 1 to 5 grs.; children in proportion to age. It should never be given in over doses.

HYPOPHOSPHITE OF POTASSA.

Hypophosphite of potassa acts well where the muscular system is diseased as well as the nervous system. It has an affinity for the muscular tissues. Where there is great debility and wasting of muscular tissue—emaciation—the potash salt will prove a positive remedy. In mialgia of any part, or a painful condition of the whole muscular system, it will likewise prove a potent remedy. Many cases called chronic rheumatism, pleurodynia, spinal irritation, lameness, cramps of the muscles, etc., are cases of mialgia, and will yield to the use of the hypophosphite of potassa. It is also useful in many cases of chronic bronchitis and asthma, as it has an affinity for the mucous membranes, more than for the lung tissue. In cases of dyspepsia, accompanied with oxaluria and emaciation, this salt has a fine effect, for it supplies the place of nitrogenous elements of food that the patient is deprived of, in consequence of his inability to digest meats, especially the fat parts of meats. It may be alternated with iron and helonias dioica, in anæmia and chlorosis, with good effect. The hypophosphite of soda may also be used, where the soda is also indicated with the phosphorus element. The dose of this phosphite is also from 1 to 2 grains, three times a day; for children, $\frac{1}{4}$ to $\frac{1}{2}$ grain is a dose.

HELIANTHEMUM—FROSTWEED OF THE UNITED STATES—FROSTWORT—HELIANTHEMUM CORYMBUS.

Helianthemum corymbus is an astringent, tonic, and very active alterative for certain forms of skin diseases, especially cancerous affections. So efficient has this article proven, that some physicians have regarded it as almost a specific in this disease. I have not found it such; but the fluid extract or saturated tincture, made from the fresh plant, is very active as an alterative. It is one of our best remedies in scrofula. In this affection, I combine it with the fluid extract of yellow porilla and scrophularia. It is a good remedy in various skin diseases, as lupus, eczema, and several others that have their seat in the cuticle. In aphthous ulceration of the mouth, there are few remedies equal to this as a local wash. It has the power to suspend the morbid condition, and substitute it by a healthy granulation, causing the ulcer to heal. This remedy has never received its merited attention from

the profession. It has been used in the form of infusion, made from the old dead plant, and of feeble strength, consequently, it did not give satisfaction; but if made from the fresh plant, it will prove of great value as an alterative. The fluid extract is the best preparation; and it should be made of the fresh herb; the dose will be from 1 to 2 oz., every four hours. The essential tincture may be given in doses of 1 to 3 oz.

IODIDE OF BARIUM—BARIC IODIDE.

This salt is formed by a double decomposition, by adding the native carbonate of baryta, in fine powder, to a solution (boiling) of the iodide of iron. The iodide of barium forms in small, colorless needles, which deliquesce slightly, and melt readily in water, but the solution undergoes decomposition if exposed to air, the iodine being set free, which soon colors the solution. It may be added to distilled water, by adding 100 grains to 1,000 drops of distilled water, and kept in colored glass bottles, well sealed.

Medical Uses.—The iodide of barium has a direct affinity for the glands, especially the lymphatic glands. It possesses a specific power over the absorbents. Dr. Hammond, of New York, recommends the muriate of barium in sclerosis of the posterior columns of the spinal cord, a condition known as locomotor ataxia, which is an atrophy of the cord, with hypertrophy of the connective tissue. And this condition may occur in the brain, which is cerebral sclerosis, or atrophy of the brain. For these conditions Prof. Hammond recommends the muriate of barium in doses of one-half grain, three times a day. Iodine being curative of soft hypertrophy, and barium of hard indurations, hence the union of the two forms a salt peculiarly adapted to hypertrophy of glandular or connective tissue. In induration of the tonsils, the iodide of barium acts promptly, much more so than iodine alone. It has proven to be a very reliable remedy for enlarged prostate glands. In acute tonsillitis, it is not as active as the muriate of barium, but in old chronic cases, with induration and hypertrophy, it acts very promptly. It is probable that it will be found to act well in indurated testicles and ovaries, also in goitre. There is one case of indurated testicles reported as diminishing very rapidly under the use of the iodide of barium. It acts well in enlargement of the mesenteric glands of scrofulous persons. May it not prove beneficial in enlargement of the mammary glands? It is favorably spoken of in syphilitic keratitis interstitial, connected with enlarged cervical glands. One writer speaks highly of its use in suppurative inflammation of the middle ear, also in phlyctenular conjunctivitis, with scrofulous ulcers. It may be given in doses of $\frac{1}{8}$ to $\frac{1}{4}$ grain, three times a day. The solution, made as above directed, may be given in doses of 5 or 6 drops, three times a day, to adults; to children, in doses of 1 or 2 drops, according to age.

JUGLANS CINEREA—BUTTERNUT—WHITE WALNUT— OIL NUT.

The juglans is an indigenous forest tree, and grows in many parts of the United States. In good soil, it often grows large, and resembles the black walnut, but the bark is much lighter colored, especially when the tree is young. The fruit or nut is also much smaller than the black walnut. The branches are smooth and of a grayish color. The leaves are long, and consist of seven or eight pairs of sessile leaflets and a single petiolate leaflet at the extremity. The leaflets are two or three inches in length, oblong and downy. The male and female flowers are on the same tree. The male flowers are large aments, from four to five inches long. The germ is surrounded by two large rose-colored stigmas. The fruit is oblong-oval, with a distinct terminal projection, hairy, viscid, green while in the immature state, but brown when ripe in the fall. The kernel is thick, oily and pleasant to the taste, more so than that of the black walnut.

Medical Properties.—The butternut, or juglans, has been used as a cathartic for some time; but, while it is valuable as a mild cathartic in small doses, yet that is not its most valuable property. As a cathartic, it is well suited for cases of constipation, attended with piles; and I have derived considerable advantage from its aperient effects in the treatment of hemorrhoids. The inner bark of the root is the most active. I have used the aqueous extract with good effects in dysentery. It is in skin diseases that I would introduce this remedy here. In chronic exanthemata, it is a very valuable remedy. I have used it much in old chronic skin diseases, alternated with the iodide of arsenic, and have succeeded in curing many cases. One writer reports several cases of skin diseases cured by it, as chronic ecthyma, erythema nodosum, impetigo figurata, herpes cercinatus, eczema of the hands. There is no doubt that it has a specific affinity for the skin, acting as a direct stimulant and tonic to the cutaneous surface; hence, it may be of material service in most chronic skin diseases. It is a valuable remedy in scrofula and scrofulous skin affections. I use mostly the aqueous extract, made by boiling very slowly the bark in water, and straining, and then evaporating down to the thickness of sirup. Of this, from $\frac{1}{2}$ to 1 ounce may be given three times a day, or 2 or 3 grains of juglandin may be given as often.

IRIS VERSICOLOR—BLUE FLAG.

The blue flag is an indigenous plant, and has a horizontal, fleshy, fibrous root, or rizome. It grows in moist places in many parts of the United States. It has blue or purple flowers from May to July. The root resembles that of the sweet flag or acorus calamus. Its taste is rather acrid. Its medical virtues are sup-

posed to reside in an oleo resin, called irisin or iridin; but, for me, nothing but the tincture of the fresh root has proved valuable.

Medical Uses.—This remedy has been used for some years as an alterative and cholagogue, but its most valuable properties are its action upon the glandular apparatus and the gastro-intestinal mucous membrane. It has the peculiar power to alter the secretory functions of the glands, changing the secretions to an acid character; hence, where the acid in the gastric juice is deficient, it acts very positively; this I have tested in my own person. It acts upon the liver to some very marked degree, though not as direct as some other articles. It acts directly upon the pancreas, and is useful in duodenal dyspepsia. Its alterative effects are marked upon the skin, and has cured psoriasis. It also has proven curative of pustular eruptions upon the head and face, as tinea, prurigo, crusta lactea, eczema and like affections. In that abnormal condition of the digestive organs of children, attended with sour vomiting, green or watery diarrhoea, accompanied with a pustular or versicolor eruption on the face or head, or even on the body, iris versicolor will aid in the cure; for it will arrest the formation of the excess of acid on the stomach, and replace it with the natural acid of the gastric juice. From this property of correcting the abnormal secretion of the glands of the stomach and bowels, it is a valuable remedy in sick headache, which is most generally caused by acidity of the stomach, or from reflexed irritation from acrid secretions from the stomach and bowels. It is a specific for headache of the front head or right side of the head, accompanied by acid vomiting or nausea. I have tested it thoroughly in this form of nervous or sick headache, and find it a prompt remedy, if given in small doses, repeated every two or three hours. I usually give 15 to 20 gts. of the saturated tincture of the fresh root every one or two hours, until relief is obtained. In facial neuralgia, it acts well in most cases. It is a valuable remedy in stomatitis. The dose of the tincture is from 15 to 30 gts.

IODIDE OF SULPHUR.

THIS IS AN OLD REMEDY.

The iodide of sulphur is an old remedy, but it has not been much used as yet. It has its specific use, and that is as a remedy in barber's-itch, for which annoying affection it has proven a very positive remedy. The triturated article—1 grain to 9 grains of sugar of milk—may be given in doses of four or five grains three times a day, and an ointment of two grains of the pure iodide of sulphur to an ounce of cosmoline may be well applied to the parts affected three or four times a day. It is also a positive remedy for acne of the face, especially if large and suppurating; and may be used as directed for barber's-itch, both locally and internally.

IBERIS AMARA—BITTER CANDY-TUFT.

THIS IS ONE OF THE OLDEST OF THE NEW REMEDIES.

The iberis has a stem about a foot in high; the leaves are acute, lanceolate, somewhat toothed; the flowers are white, in corymbo, becoming racemes; silicles obcordate, narrowly emarginate; cells, one-seeded. It is an annual, common in Europe, indigenous in England, and cultivated in the United States in yards and gardens. The seeds are the parts used in medicine.

Medical Uses.—Dr. Sylvester speaks highly of the iberis in hypertrophy of the heart. He used the seeds, rubbed up with cream of tartar, in doses of 1 to 3 grains. It was introduced into practice by Dr. Williams, of London, England. The sphere of action of iberis amara is upon the heart and all those organs most intimately connected to it or controlled by it. Like digitallis, aconite, cactus, collinsonia, veratrum and lycopus, it has a direct affinity for the heart. It possesses the peculiar power to lessen the force of the heart's action without lessening its velocity. It controls the sharp action of the heart, and thereby softens the pulse; hence, it is a valuable remedy in hypertrophy of the heart with dropsy. In doses of 1 or 2 grains of the seeds, it depresses the force of the heart, which effect lasts for three or four hours. Dr. Sylvester says that it often acts like magic in hypertrophy.

JABORANDI.

This plant has not been long in use by American physicians. It has proven to be a very active diaphoretic; in fact, it is, perhaps, the most active one that we have used. It seems to have a specific affinity for the sudorific glands, producing their free action, without interfering with the circulation. It may be used, in the form of an infusion or saturated tincture, in all those diseases characterized by a dry and harsh skin. In fevers and some inflammatory diseases, it is often necessary to act freely upon the skin, and this remedy is always very suitable for that purpose, as it does its work without constitutional disturbance. Its specific tendency to the skin may prove it a good remedy in some dry-skin affections; it is worthy of a trial in that direction. We should further test our remedies according to their specific affinities. There are many remedies that have active properties not yet discovered. For several years, I have been testing many of our old remedies in this way, and find many valuable therapeutical properties in some of them not before discovered.

The jaborandi has not been used much in the form of a tincture, the dose of which is 1 drachm. The infusion may be used freely.

LAPIS ALBUS—SILICO-FLOURIDE OF CALCIUM— GNEISS OF THE SPRINGS OF GAS- TEIN OF GERMANY.

The springs of the Tauern Mountains of Germany, flowing through the Achen Valley, over a species of gneiss, are impregnated with silico-flouride of calcium, or lapis albus—white, primitive, calcium gneiss. It contains fourteen parts of calcium, fifty-five parts of flourine, fifteen parts of silicium (silëx), water fifteen parts. It is a white, glimmering, impalpable salt. The triturated gneiss from the Gastein Springs of Germany are used in various doses.

Medical Properties.—The silico-flouride of calcium has been highly recommended in cancer and malignant ulcers. Whether it will prove all that its discoverer claims for it, is yet to be determined by time. As cancer has proven the most obstinate of all the cachexias, it is well to try this new remedy in that dreaded disease, as it may prove valuable. A great many cases are reported as being cured by it. It is also represented as being valuable in scrofulous abscesses and ulcers, and likewise in affections of the glands and lymphatics. Five cases of uterine carcinoma are reported as being permanently cured by it. This looks like it must possess some considerable power over cancer. The dose of the first dec. trituration may be given in from 3 to 5 grs. three times a day.

LACTUCARIUM.

Lactucarium is the active principle of the *latuca sativa* and *virosa*, or lettuce. This article has not received that attention from the profession that it deserves, and that is one main reason that I introduce it in this place. During the earlier ages of medical science, this remedy was more used than now; but it is now laid aside for that objectionable substitute, opium, which, though it acts more energetically and promptly, yet it is often attended with many objections, as its great tendency to constipate the bowels and leave injurious effects upon the brain, etc. Lactucarium is a mild narcotic, anodyne, sedative, diaphoretic, diuretic, hypnotic and antispasmodic. As an anodyne, it is valuable in those cases of inflammatory and febrile diseases attended with nervous irritation and vascular excitement, where opium is contra-indicated. Where opium would accelerate the circulation and produce either stupor or delirium, the lactucarium will alleviate pain, diminish the action of the heart, reduce the heat of the surface, and dispose to sleep. It also allays cough in phthisis and other affections of the air passages. It is a valuable remedy to allay the tormina and tenesmus of dysentery. In *ardor urini* and irritability of the bladder, it is an admirable remedy. The dose is from 2 to 6 grains.

LILIUM TIGRINUM—TIGER LILY—SPOTTED LILY.

The tiger lily is a showy plant when in bloom, and often cultivated as an ornamental plant. It is a native of China and Japan. The stem grows from four to six feet high, and is without branches. The leaves are sessile and scattered, three-veined, the upper ones cordate-ovate. The axils are bulbiferous. The flowers are large, in a pyramid at the summit of the stem, and are of a dark orange-color, with black, or very deep crimson spots, somewhat raised, which make the flowers resemble the skin of the tiger. It blooms in July and August. There are small bulbs at the junction of the leaves and stem.

Medical Uses.—The sphere of action is upon the reproductive organs. It influences the ovaries, uterus and their appendages; also it influences the productive organs of the male. Its specific affinity for the ovaries renders it a very positive remedy for too frequent and profuse menstruation. It is a very prompt remedy in congestion of the ovaries, which often retards menstruation and causes a scanty flow of the same. It is valuable in chronic and subacute inflammation of the ovaries. It is equally as positive in congestion of the uterus. The tincture of the bloom is used, in doses of 5 to 6 drops, three or four times a day. It should not be given too largely.

LYCOPUS VIRGINIACUS—BUGLE WEED—WATER HOARHOUND.

The lycopus is an indigenous plant, growing in most parts of the United States, in moist, shady places, near water, ditches, swamps and creeks. The whole plant has a balsamic odor, something like turpentine, and a bitter taste. Water extracts its medical virtues thoroughly, and hence an aqueous extract is the best.

Medical Properties.—This is a very useful remedy, though it seems never to have attracted much attention. It is a sedative to the heart, and a tonic to the digestive apparatus. I have found it to produce the happiest effect in hemorrhages, especially of the lungs, and at the same time it increases digestion. I have had it to arrest hemoptitis in a few hours, even when it was profuse and alarming. It seems to control the vascular excitement in a way peculiar to itself. It is also a valuable remedy in the treatment of diabetes insipidus and saccharina. I am now treating a case with it and nitrate of uranium. I first treated it with tonics and the lycopus, and it improved rapidly, and I have now added the uranium nitrate. It is a good remedy in chronic coughs, with profuse expectoration. The dose of the infusion is 1 to 2 ozs.: the dose of the fl. ex., 1 to 2 drachms. It is curing my case of diabetes rapidly, more rapidly than any remedy.

LEPTANDRA VIRGINICA—BLACK ROOT—CULVER'S PHYSIC.

The leptandra is the veronica virginica of Linnaeus. It is indigenous to the United States, with a perennial root, branching, black externally, and of a bitter taste. It has a simple, straight stem, smooth, and from two to five feet high. It grows in many parts of this country. The leaves are in whorls of four to seven in each whorl, on short petioles, lanceolate, acuminate, and finely serrate. The flowers are white, numerous, nearly sessile, in long, terminal and verticillate, subterminal spikes. It flowers in July. Its active principle is supposed to be in a resinous substance called leptandrin, which melts in water and alcohol.

Medical Properties.—It has a specific tendency to the liver, arousing its secretory function, and also the glands of the bowels, and to some extent, the other glands of the body. In the experiments, made by Prof. Rutherford and M. Vignall, with various remedies, leptandrin was found to increase the amount of bile, but not so powerfully as ipecac and podophyllin, and some other articles, but it seems to increase the solid elements of the bile, and diminish the fluids of the bile, hence, is a valuable remedy. The dose of the leptandrin is from 1 to 2 grs.; dose of the tincture, 10 to 20 drops. I do not use it to purge.

KALMIA LATIFOLIA—SHEEP LAUREL—CALICO-BUSH IVY, ETC.

Kalmia is a very powerful alterative in syphilis. It may be used in the primary stage, as well as the secondary and tertiary stage of syphilis. It is a powerful sedative to the heart, and must always be used carefully, as an overdose will prove dangerous. I use a saturated tincture of the leaves, made by covering them in alcohol (76°), and steeping ten days, then percolating. The dose, as an alterative, is from 3 to 5 drops, every four hours. The antidote for an over dose, is spirits. I have used it as an alterative, but not much as an arterial sedative. I have found it a very active alterative in the primary stage of syphilis, alternated with the chloride of gold and soda. I have found it a valuable local application to some skin diseases, as dry tetter, especially that form that attacks the hands, causing them to crack in cold, windy weather. I use it for tetter, in the form of an ointment, made by boiling the leaves until the strength is exhausted, then boiling it down to the consistence of sirup and adding lard equal quantity to the extract, drying out the water slowly. This is applied to the tetter three or four times a day. With this ointment I have cured this obstinate disease, and this is the only way I could ever cure it with any certainty. It is a virulent poison in over doses.

MITCHELLA REPENS---WINTER CLOVER--DEER-BERRY SQUAW VINE--ONE-BERRY.

This is an indigenous little plant, with a perennial root and a smooth, creeping stem or vine, furnished with roundish-ovate or slightly heart-shaped leaves, which are petiolate, opposite, flat, coriaceous, dark green and shining, usually variegated with whitish lines. The flowers are white, often tinged with red, very fragrant, and in pairs, with their ovaries united. The calyx is four-parted, corolla funnel-shaped, two on each double ovary; limb four-parted, spreading, densely hairy within; stamens, four, short, and inserted on corolla; style, slender; stigmas, four. The fruit is a dry berry--like double drupes, crowned with the calyx teeth of the flowers, each containing four, small, seed-like, bony nutlets. It grows in dry woods and swampy places, among the hemlock timber: flowering in June and July. The leaves resemble clover, and remain green all the winter; hence it is called "Winter clover." Its fruit is a red berry, nearly tasteless.

Medical Uses.—This little plant has a direct affinity for the uterus and urinary organs. The Indian women used it to facilitate child-bearing; and it has a tonic effect upon the muscular structure of the uterus, and does materially aid parturition, if given in time. It is a valuable female remedy, for which the people use it much. I have frequently used the compound tincture of this herb, with the most satisfactory results, in cases that had previously been lingering and very tardy, and have always found it to have a direct tonic effect upon the uterus. I have used the same compound in those cases where the ladies had acquired a habit (as it is called) of aborting at a certain time; and it has invariably broken up that morbid condition, and caused the mother to go her time, and bring forth healthy offspring, without undue suffering. This little plant acts well upon the urinary organs. In chronic cystitis, or catarrh of the bladder, an infusion, drank freely, is a good remedy. For urethritis, of a chronic character, it acts well. In delayed menstruation, it is a prompt remedy, if given in large doses, say $\frac{1}{2}$ to 1 drachm of the saturated tincture or fluid extract. In many cases of painful menstruation, which are often the result of engorgement, this remedy, alternated with viburnum opulus, will give positive relief to this most painful affection. This I have proven in a great many cases, and this property alone would entitle it to universal use. The dose is from 20 to 60 drops, three or four times a day, of the tincture.

MENISPERMUM CANADENSE—YELLOW PARILLA— VINE MAPLE—MOONSEED.

This plant has a perennial, creeping, long, woody root, of a yellow color. The stem is round and climbing, and about one or two feet in length. The leaves are roundish, cordate, pellate,

smooth, glaucous-green above, paler beneath, entire, and four or five inches in diameter.

The flowers are in clusters, of a yellow color and small. The fruit is a drupe, and about one-third of an inch in diameter, and contains but one seed. It grows in moist woods and hedges, and along streams, from Canada to Georgia, and west to the Mississippi Valley. It is very plentiful in Middle and Upper Georgia. It flowers in July. The root, which is the part used, is of a bitter taste, a little acrid, but not very unpleasant to the taste. It yields its medicinal virtues to water and alcohol. It is called by the people the American sarsaparilla. Its active principle is called menispermine; but, like many other extracts, it but partially represents the crude article. It doubtless contains a tonic principle allied to berberin, if not identical to it, which is not dissolved by alcohol, but is soluble in water. The fluid extract, made from the fresh root with water and alcohol, would contain its virtues, provided it is made without heat, as all extracts should be.

Medical Properties of Menispermum, or Yellow Parilla.—Menispermum canadense, or yellow parilla, is a valuable alterative and tonic, two properties very necessary in most cases of depraved conditions of the blood, as in syphilis, scrofula and mercurial diseases. It is a very positive remedy in scrofula. I have just cured several cases of scrofula with this article and rumus crispus, alternated with iodide of potassium. I have often used a fluid extract, or an essential tincture, in syphilis with good effect. As an anti-syphilitic, I think it is superior to the foreign sarsaparilla, especially when the sarsaparilla is in its old dried state as we get it. I use the menispermum in its fresh state. It grows plentifully in Middle Georgia, on the streams; and I have it gathered, and I tincture it while fresh; and in this way I get a good alterative. It has a direct effect upon the gastric and salivary glands; hence its utility in dyspepsia. The fluid extract may be given in doses of 20 to 30 drops. The essential tincture may be used in doses of 30 to 60 drops three or four times a day. For scrofula, I usually combine this with scrophularia and rumus crispus, or the stillingia and corydalis. With these remedies, I have seldom failed to cure any case of this disease. I use all these articles in their fresh state. This is a valuable alterative.

MULLEIN—VERBASCUM THOPSUS.

Mullein is represented as demulcent, diuretic, anodyne, and antispasmodic; but it does not seem to be very active. Given in warm infusion, it is beneficial in colds and coughs; locally applied, it is a good poultice to swellings, inflamed ulcers and piles. It is a very good application to mumps, either to the glands or to the testes, when they become inflamed from various other causes; in fact, I have not found anything as good in such cases, applied warm and well wilted. It is used by the people in coughs and colds.

MARSH ROSEMARY—STATICE CAROLINIANA—SEA LAVENDER.

The marsh rosemary is indigenous, growing in the salt marshes along the entire Atlantic coast. The root is the part used; it is large, fleshy, fusiform or branched, of a purplish-brown color externally, light purplish-red internally. It is odorless, but possesses a slight saline, very astringent taste. Boiling water and alcohol, properly diluted, extract its medical virtues. It contains tannic acid, gum, resin, volatile oil, salts of soda, lime, potash, besides other principles.

Medical Uses.—It possesses remarkable astringent properties, some tonic powers, and considerable antiseptic influence; hence, it is valuable in many diseases where an astringent tonic and an antiseptic is required. It is a very appropriate remedy in aphthæ and ulceration of the mouth and throat. It is a good gargle in scarlatina maligna and cynanche maligna; it may be administered also internally in these diseases with good effect. As a poultice, it may be applied to fetid or gangrenous ulcers with happy effect. In cases of leucorrhœa, where the discharges are corrosive or offensive, it may be used as a vaginal wash, while the iodide of arsenic is given internally. In hemorrhoids, in the form of an ointment made of the powdered root, in cosmoline, it will be found a good application. In passive hemorrhages it has a good effect. In gleet and chronic gonorrhœa, its mild, astringent effects, together with its antiseptic powers, render it a very appropriate remedy. I have often used it and the *hydrastis canadensis*, infused in water, as an injection in leucorrhœa with good effect. The dose of the tincture is 20 to 30 drops, every three hours.

ODOFORM.

Iodoform is another compound of iodine that has a peculiar effect not so promptly obtained from the iodine alone. I have used it frequently in enlargement of the lymphatic and cervical glands with the most prompt success. I have used it in the early stage of bubo, and have dispersed the bubo by the continued use of it, locally applied, in the form of a liniment, made by adding $\frac{1}{2}$ oz. to 1 oz. of iodoform to 1 oz. glycerine or cosmoline, and apply three or four times a day. It acts well in scrofulous enlargement of the glands. It seems to enter the circulation by absorption more readily than iodine alone, and consequently to relieve glandular diseases more promptly than iodine by itself. I see a case of sciatica reported as cured by iodoform and iron recently by Dr. N. C. Chapman, of North Carolina. I think it will prove valuable in many skin diseases of a scrofulous character, in which it may be given internally, and the ointment, made as above, applied locally to the parts three or four times a day.

The dose need not be large, say from $\frac{1}{2}$ to $\frac{3}{4}$ of a grain three times a day in sirup of acacia or in simple sirup.

MYOSOTIS SYMPHITIFOLIA.

The myosotis grows in marshy grounds, and sometimes in high ground among the trees, and on hillsides on rich land. The stalks are from one to three feet high, sometimes in bunches, sometimes single. The leaves are lanceolate, not slim; distinct, medium vein; smaller veins running out to near the edge of the leaves, and branching from the medium vein alternately, not anastomosing; both sides of the leaf are hairy. The flowers are in clusters, on branching stems at the top of the stalk, and are very small, of a whitish color, tinged with a faint red or blue shade. The seeds are globules, covered with stiff hair, or fine prickles. The root is, at the largest part, hollow, the pith seemingly having rotted; small ones, woody and tortuous. This plant is of the family of the comfrey and "forget-me-not," there being several species. This species resembles the arvensis very much, but has larger leaves than the arvensis. Some botanists think that it is the arvensis, and that its larger leaves are attributable to its growing on rich ground; others think that it may be a cross of the arvensis with another species. Its species is doubtful.

Medical Properties.—Myosotis was used by some people who had seen a species of the plant used in Germany for pneumonia and pleuritis, and other lung affections. It grows about Evansville, Ind., and is there used by the people, who believe that it possesses positive power over lung affections of an acute character. They call it the black root, and it resembles a variety in Germany that they call "Schwarzwurzel." In cases of pneumonia, attended, as they often are, with profuse expectoration, this remedy has proved very positive in its effect, relieving the cough and diminishing the expectoration in a few hours. Such cases are reported as cured in two days by it, given in small doses. A case of chronic cough, following typhoid fever, is reported as being cured with five-drop doses of the tincture, in a few days, after all other remedies failing for three weeks. From the reports, it is doubtless a valuable remedy in chronic lung affections. The saturated tincture is used in doses of from 5 to 10 drops. An aqueous extract would probably be a better preparation, as it would contain more mucilage.

IODIDE OF CADMIUM.

Iodide of cadmium possesses all the valuable properties of iodine, and has the one advantage that it has no odor, nor does it stain the skin. It makes a white ointment, and does not irritate the skin, and is very readily absorbed, when applied by gentle friction. It is a very active remedy in scrofulous enlargement of the glands, rapidly reducing the enlargement, without any irritation whatever. It is a remedy also in nodes and chronic inflammation of the joints. One grain of cadmium to ten grains of cosmoline forms the ointment, which may be applied freely to the part affected.

NUPHAR LUTEA—YELLOW POND LILY—SMALL- FLOWERED YELLOW POND LILY.

There are three species of the nuphar in the United States—namely, nuphar advena, nuphar kalmiana, and nuphar lagittæfolia. The nuphar advena has large yellow flowers; the nuphar kalmiana was once called by Smith, Torrey and Gray, the nuphar lutea. The small-flowered variety is the one used, which is the nuphar lutea. It grows in the interior of the State of New York. The tincture should be made from the root, leaves, flowers and peduncles, to be medical.

Medical Uses.—This is an old remedy, but has never received due attention. Pliny and Dioscorides mention it as depressing the animal propensities. In the sixteenth century it was regarded by physicians as an anaphrodisiac; but recent investigations have proved that it has an affinity for the intestinal canal, especially upon the lower portion, and also upon the generative organs, the cerebral nerve-centers, and to some extent, the glands of the skin. It is a valuable remedy in nocturnal emissions—having frequently cured confirmed cases. It is also a positive remedy for morning diarrhœa—having cured many cases recently. It cures entero-coletis and common diarrhœa. It relieves headache connected with diseases of the generative organs. It fills a place thus in the materia medica, not filled by anything else.

NITRATE OF URANIUM—URANIC NITRATE.

Uranium is a metal obtained from *pitchblends*, and the nitrate may be formed by treating the metal, or any of its oxides, with pure nitric acid. It crystallizes in lemon-yellow prisms. It is efflorescent in dry air, and deliquescent in damp air; it dissolves in 0.35 parts of pure alcohol and in 0.5 of water. The recent aqueous solution is the best preparation for use, and it should be made in distilled water.

Medical Uses.—In large doses it is acrid, and produces ulceration of the stomach and bowels, as almost all the metallic salts do. In medium doses, say $\frac{1}{2}$ to $\frac{3}{4}$ of a grain, it produces headache and vomiting, tenesmus of the bladder, and sometimes violent colic and constipation. In doses of $\frac{1}{16}$ to $\frac{1}{4}$ of a grain, it has the peculiar power to lessen the sugar in the urine in diabetes; it should be given in water, three times a day, and if the above dose produces any of its toxic effects, it should at once be discontinued for a few days, then resumed in smaller doses. I am now treating a case of diabetes with this remedy, and it produced headache, and I shall lessen the dose, otherwise it seems to be doing very well. There are many cases on record cured with it, and I think it, alternated with lycopus, will be successful.

POLYMNIA UVEDALIS—BEAR'S-FOOT.

This plant is found in most parts of the United States, but is abundant in the Middle and Southern States and Western States. The root is the part used, which is blackish without and whitish within, resembling in shape a small, sweet potato; there are several small roots from one main root-head, similar to the sweet potato, and from this root-head spring up several stems, close together, which are spotted, and grow some five feet high. The leaves are about the size of a man's hand, but in shape they resemble a bear's-foot, whence the name "Bear's-Foot."

Medical Uses.—For several years I have used this plant in rheumatism, as an ointment, made by stewing the fresh roots in sweet oil or lard. I have also used it very successfully in white swelling and morbus coxalgia, given internally, and the above ointment, united with the oils of cedar and sassafras. It is also a good application for risings, burns, sprains, bruises, etc. It has lately been introduced as a remedy in enlarged spleen, and it seems to have that effect. The Indians used it and the apocynum cannabinum in syphilis with good success. It is a good alterative in scrofula. I have used it in a good many cases of scrofula, and find it to act well. I usually alternate it with scrophularia and yellow parilla and some of the iodides. It is worthy of much more attention than it has received. The dose of the saturated tincture is 30 to 60 drops.

OXALATE OF CERIUM.

This salt is formed by adding of oxalate of ammonium to the soluble salt of cerium, which precipitates the oxalate of cerium. The old formula, or nomenclature, is ${}^2\text{Ce}^{\text{el}}\text{C}^4\text{O}^6\text{H}^6$; and according to the new, $\text{Ce}^2\text{CO}^4\text{H}^3\text{O}$. It is a white, granular powder, devoid of taste or odor; insoluble in water, alcohol or ether, but soluble in sulphuric acid. The nitrate is now made and used in the form of an effervescent salt. The nitrate is readily dissolved in alcohol or water. A solution of it may be made by adding 1 gr. to 10 drops of water, or of any other convenient strength for prescription. The oxalate may be triturated 1 gr. to 10 of sugar of milk.

Medical Uses.—This remedy has been used exclusively as an antiemetic, but it may prove of value in some diseases of the mucous tissue of the stomach and bowels. In obstinate cases of chronic vomiting, and in the vomiting of pregnancy, it has proven very valuable in many instances. It fails in some cases, as good remedies does do, but it proves very positive in many more: consequently, it is worthy of a trial in all cases of morning vomiting of pregnant females. It has usually been given in doses of 5 grs., but 2 or 3 grs. of the 1st dec. trituration seems to be best.

NYMPHŒA ODORATA—WHITE POND LILY.*

This species of lily has a blackish, fleshy, large, perennial root or rhizoma, growing in the mud where water is from three to ten feet deep, and is often as thick as a man's arm, sending up its leaves and flowers to the surface. It has long petioles, somewhat semicircular, and perforated throughout by long tubes or air vessels, which serve to float them. The leaves are orbicular, sometimes almost kidney-shaped, pellate, cordate, cleft at the base, quite to the insertion of the petiole; the lobes, one on each side, prolonged into an acute point, entire, reddish, with prominent veins beneath, dark, shining green above, and from five to six inches wide. The flowers, like the leaves, float on the water, and are large, white, or rose-colored, and fragrant: a western species, the *nymphœa tuberosa*, is without odor. The sepals are four, lanceolate, green without and white within. The petals are numerous, lanceolate, and from one to two inches in length, of a most delicate texture, white, sometimes tinged with purple on the outside. The stamens are numerous, yellow in several rows. The filaments dilated gradually from the inner to the outer series, so as to form petals. The anthers grow to the filaments. The seed are in a pericarp or berry, and are many.

Medical Properties and Uses.—The white pond lily is an old remedy, yet its medical virtues have not been well known until recently. It has a specific effect upon the mucous tissues, especially that of the mouth, bowels, uterus and urethra and vagina. There is the report of the case of a lady, who was pronounced to have uterine cancer, which had resisted all treatment, and was cured by a squaw with this article, given internally in infusion, and locally applied by injections to the neck of the uterus. Several cases of acrid, corrosive leucorrhœa are reported as cured with the remedy. A great many women have cured themselves by drinking an infusion and injecting with it, of obstinate and long-standing attacks of leucorrhœa. Thus it was brought to the notice of a few physicians. Many cases of obstinate ulceration of the mouth have been cured by it. It is a valuable remedy in ulceration of the os uteri, and if alternated with permanganate of potash, as an injection, they will cure that diseased condition of the mucous tissue without subjecting the woman to the unpleasantness of cauterizing every few days with nitrate of silver or other caustics: this I have demonstrated frequently. The dose of the tincture is 1 drachm, three times a day.

PASSIFLORA INCARNATA—WHITE PASSION FLOWER —MAY POP.

This is a climbing vine, with long tendrils, having a smooth stem, some four to ten feet long. Its leaves are three cleft; the lobes serrate; petiole bearing two glands; the flowers are large,

showy, nearly white, with triple, purple and flesh-colored crown ; the involucre three leaved. The fruit is egg-shaped, and about the size of a hen's egg, and when crushed makes a loud report, which gave it the name of "May Pop." It grows abundantly in various parts of the United States, in fields, in ditches, and about embankments. It is worthless on very rich soils, as about the levees along the Mississippi river and other very rich lands elsewhere.

Medical Uses.—It has some of the effects of aconite, chloral hydrate, nitrate of amyl, gelseminum, cannabis indica, Calabar bean, and the bromides, but differs from them all. As early as 1838, Dr. L. Phares called attention to the superior powers of this plant, and he says that he learned its value in nervous affections from his preceptor, Dr. W. B. Lindsay, of Bayou Gros Tête, La. He says that Dr. Lindsay used it for thirty years in tetanus infantum or neonatorum. It produces sleep, but does not narcotise or stupefy the patient, as they may be wakened up at any time, and they are perfectly rational. He used it also in neuralgic affections with the most perfect success, relieving the pain and producing quiet, refreshing sleep. He found the extract of the root a valuable application to painful buboes, and also to erysipelas, applied locally. He says he often cured irritable and painful piles with two or three applications. He says also: "I have never found its equal in fresh burns." During the last war, he says he used it with astonishing success in syphilis. Dr. E. M. Hale, one of the most industrious investigators of new remedies, says he has used it in erysipelas with the most flattering success ; also in ulcers, neuralgia and tetanus, with unusual success. He also reports a case of convulsions cured by it in a short time. It is equally successful in tetanus of horses and other animals. The best preparation is the inspissated extract, made of the root, stems, blooms and leaves, while in full bloom, and dried in the shade, and then powdered and kept dry for use. Dose, from 1 to 4 teaspoonfuls, repeated until it relieves. It is likely that a hydra-alcoholic extract of the freshly dried plant, leaves, root and flowers, would be a good preparation. There is a report of the successful use of this preparation in tetanus, with episthotonos, trismus and convulsions in a child two years old. Also one case of sleeplessness and suicidal mania cured by it. Thus, a very valuable remedy is found in our fields, put there, like many others, by Divine Goodness on purpose.

PHYTOLACCA DECANDRIA—POKE ROOT.

Phytolacca decandria, or poke root, grows over most parts of the United States, and is so well known that it needs no description. It has been used for a great many purposes, but its use now is confined to the treatment of rheumatism and syphilis,

scrofula and other blood poisons. I have used the *phytolacca* a great deal in syphilis, and find it an active alterative. I have used it also in subacute and chronic rheumatism to a considerable extent. In many cases of rheumatism, especially in those cases depending upon excess of acid in the blood, it acts finely, as there is, perhaps, no vegetable remedy possessing as much potash salts as the *phytolacca*. Most of that sold in the markets is worthless, as it is generally made of the dried root. It should always be made of the green root. The saturated tincture, made by covering the crushed root in alcohol, will always be active in doses 15 to 20 drops. The fluid extract, made of the fresh root, may be given in doses of 5 to 15 drops. In inflammatory rheumatism, a poultice of the root is a good application, frequently removing the swelling in one or two days. I frequently alternate or combine this with the tincture of cohosh, or that of colchicum, in cases of subacute and in the latter stages of acute rheumatism, and find them act well. In some cases the tincture of the berries (saturated) seems to act better in rheumatism than the root. I have cured severe cases recently with the tincture of the berries and the tincture of *cimicifuga*, in doses of 20 drops each, every four hours. In syphilis, I combine it with *stillingia* or *corydalis formosa*. But in addition to its value as an alterative and anti-arthritic, it possesses another peculiarly valuable property, which is its power over inflammation of the mammary glands of the female. Applied as a poultice and given internally, there is nothing so positive in its action as the *phytolacca* in cases of inflamed breasts of females. It has been known to remove the inflammation and soften the caked breast of females in a few hours. There was a young mother applied to me a short time ago, who had a large cake, or induration, in one mamma, attended with much inflammation and pain. I gave her 10 drops of the tincture every three hours, and applied cloths, wet in the tincture, renewed every four hours, and in twelve hours the cake, together with the fever and pain, disappeared. It is equally as good for inflamed udders of milch cows, in which it should be rubbed frequently upon the udder. I have used it frequently in chronic enlargement, with induration of the mammary glands (often treated for cancer of the breast), with the happiest success. It should always be made from the fresh root, in (50°) alcohol, and the tincture kept from light and heat. As sold in the market it is often worthless, as it is made of the dried root. I cover the root in (50°) alcohol, and steep ten days and percolate. Dose, from 10 to 20 gtt.

PHOSPHIDE OF ZINC.

The phosphide of zinc is a black granular powder, very much like iron by hydrogen, and has the smell of phosphorus and has the taste of phosphorus. It is insoluble in water. It may be

trituated with sugar of milk, one grain to nine of the sugar of milk, the dose then will be from $\frac{1}{2}$ to 1 grain; or it may be trituated with sugar of milk and gum acacia and made into pills, each pill to contain $\frac{1}{10}$ to $\frac{1}{15}$ of a grain of the phosphide.

Medical Uses.—This preparation of phosphorus has all the power upon the brain and nervous system that phosphorus has, and then it exerts a much more extensive influence over the brain and spine than phosphorus. It has some of the effects of the bromides, conium, gelseminum, zinc, and that of arsenic. I have used it very successfully in cerebral congestion and a tendency to apoplexy, in several cases. A friend of mine was complaining of weight, and at times fullness, with some pain, in the occiput, with loss of memory, and an uneasiness and a kind of dread of something evil impending him. I prescribed the phosphide of zinc in doses of $\frac{1}{10}$ of a grain, three times a day, and in a few weeks, he reported himself well. Another friend of mine applied to me for treatment recently. He complained of an uneasy feeling about the head, sleeplessness, loss of memory, and an impossibility of concentrating the mind upon any subject, together with a dread of dementia, as his father had died in that condition. I put him upon the phosphide of zinc, $\frac{1}{10}$ grain, three times a day, and he very gradually improved, and in the course of two months appeared well, and has resumed business, and still appears to be well. A noted divine who, from hard study, had overworked the brain, applied to me for treatment. He complained of great prostration, vertigo, and extreme nervousness, together with dread of impending evil and restlessness and sleeplessness. I put him upon the phosphide of zinc, $\frac{1}{10}$ of a grain, three times a day, gradually increasing the dose up to $\frac{1}{6}$ grain, three times a day, alternated with small doses of belladonna; and under this treatment he is gradually recovering his health. I think it will prove a good remedy in chorea and delirium tremens. It will doubtless prove valuable in impotence of a cerebral origin and from abuse of the sexual functions. It is a speedy nerve tonic and stimulant. Prof. Hammond introduced it to the American physicians. He recommends it in spinal anæmia and passive congestion, and reports many cases treated with it. (See Hammond "On Nervous Diseases.")

POLYGONUM PUNCTATUM—WATER PEPPER..

Polygonum, called smart weed, grows in almost every lane and about every lot in Middle Georgia, and comparatively unnoticed by the profession at large; yet it is one of our most efficient diaphoretics in large doses. The fluid extract may be given in doses of 1 to 2 drachms, every two or three hours, as a diaphoretic and as a stimulating emmenagogue, where the suppression is from sudden cold. But one of the most specific tendencies of water pepper is to the urinary organs. I have used it in irritable bladder and catarrh of the bladder, with the best results. For this

purpose, the aqueous extract may be given in wineglassful doses, every hour or two, until it relieves the difficulty. The saturated tincture of the freshly dried herb may be made by covering it with alcohol (60°). The dose will be from 1 to 3 drachms, according to the effects desired. An infusion has seemed to have the desired effect with me for urinary difficulties, but for winter use, the fluid extract, or the saturated tincture, is preferable. There are two varieties: one that is small and has peppery taste, the other is larger and has no biting, peppery taste. The small variety is best, and loses its biting taste by tincturing or infusing.

CENOTHERA BIENNIS—TREE PRIMROSE.

This is an indigenous, biennial plant, with an erect, rough stem, branching, and grows to the height of two feet, and sometimes even to five feet. Its leaves are ovate-lanceolate, alternate, acute, obscurely toothed, roughly pubescent, from three to six inches long, and from one-half of an inch to one inch wide; those on the stem sessile and the radical ones tapering into a petiole. The flowers are numerous, pale-yellow, sessile, odorous, and are in terminal, somewhat leafy spikes; they are nocturnal, open but once, and that at night, and continue but one day.

Medical Uses.—This remedy has proven of inestimable value in summer diarrhœa of children, as well as of adults. It is a very positive remedy for cholera infantum, and for the diarrhœa following it, also for chronic diarrhœa. It has proven thus to exert a positive curative effect upon the mucous tissues and glands of the bowels; doubtless, its specific affinity for that tissue will yet prove of much value in other affections. We are but just beginning to watch the specific tendencies of our remedies. The dose of the tincture is from 20 to 60 drops.

MOMORDICA BALSAMINA—BALSAM APPLE.

Balsam apple is grown in our gardens, and known to the people as a good remedy in colic. They tincture it in whisky, and take it for colic. A saturated tincture, made by covering the ripe fruit in alcohol (60°), steeping ten days and pressing out the tincture, will be found a good antispasmodic anodyne in colic; and then, saturated with sugar, the above tincture makes one of the best applications to fresh cuts, causing them to heal by the first intention, if the edges are kept in contact. I have used this tincture for many years in dressing fresh cuts, and have found it a very positive remedy to heal wounds. It should be made just as the fruit turns yellow, and begins to crack open.

PULSATILLA NUTTALLIANA—ANEMONE—AMERICAN PULSATILLA.

Dr. W. H. Miller, of St. Paul, Minnesota, introduced this plant to the notice of the profession; but a German pharmacist of Philadelphia was the first to call attention to it in his inaugural essay to the College of Pharmacy, and he was a brother of Dr. W. H. Miller; his name was A. W. Miller. (For plate and full description, see the author's "Epitome of New and General Materia Medica.")

Medical Uses.—Dr. Miller, of St. Paul, Minnesota, claims that pulsatilla is a valuable remedy for chronic diseases of the eye, such as cataract, amaurosis and opacity of the cornea. It should always be tinctured while fresh; and the root, bloom, stem and leaves should be used in making the tincture, which should be made with 76° alcohol, as it loses its strength in drying. In small doses, pulsatilla resembles assafoetida, valerian, scutillaria and cypripedium. It is a valuable remedy for sick headache, especially that which follows menstruation. It is a remedy for dyspepsia, diarrhoea, colic and vomiting. It is also a remedy in leucorrhœa, ovaritis, mucous-matritis and mucous-cervitis. It is very prompt in amenorrhœa and dysmenorrhœa. In the sudden suppression of the menses by cold, the pulsatilla is one of our most prompt remedies. The dose need not be large, as toxic effects would be produced. The usual dose is 10 to 20 gts. This is one of our most valuable female remedies.

PANCREATINE—INSPISSATED PANCREATIC JUICE..

This is a grayish powder, having somewhat the odor of rancid lard. It is prepared from the finely cut pancreas of animals, macerated in water, acidulated in muriatic acid for about forty-eight hours, then separated, then filtered through a pulp filter until it is perfectly clear; then to this clear solution is added a saturated solution of chloride of sodium, and allowed to stand until the pancreatine is separated. This is carefully skimmed off and placed upon a muslin filter and allowed to drain, then washed with a less concentrated solution of chloride of sodium, then pressed, and when dry, it is rubbed up with the sugar of milk.

Medical Uses.—Pancreatine resembles, in its action, iris, pepsin, pulsatilla, ptelia and nux vomica. It, like iris, pulsatilla and ptelia, has the power to digest fatty and starchy articles of food. There are many cases of dyspepsia that consist of a deficiency of this element, and may be known by the patient's inability to eat, without suffering, fatty articles of diet: here, pancreatine will do much good. The dose may be regulated according to the severity of the disease; from 4 to 5 grs. is usually sufficient for each meal, and should be alternated with ptelia and iris versicolor.

PTELIA TRIFOLIATA—WAFER ASH—WINGSEED— SHRUBBY TREFOIL.

The ptelia is a shrub growing from six to ten feet high, with trifoliate leaves, marked with pellucid dots; the leaflets are sessile, ovate, short, acuminate, downy beneath when young, crenulate, or obscurely toothed; lateral ones inequilateral, terminal ones cuneate at the base, from three to five inches long, from one to one and a half inches wide. The flowers are polygamous, greenish white, nearly corymbose cymes; stamens generally four; style, short; fruit, a two-celled samara, nearly an inch in diameter, winged all around, nearly orbicular. It grows in many parts of the United States, mostly west of the Alleghanies, in shady, moist hedges, sandy river-bottoms, and flowering in June. The bark of the root is the part used, which is of a pungent, bitter taste, and of a light-yellow color outside, and breaks with a resinous-like fracture.

Medical Properties.—This is one of our most positive and direct tonics, acting like hydrastis and nux vomica. It has considerable affinity also for the liver. I have often used it with the happiest effect in congestion of the liver and dyspepsia. There are very few remedies that act so promptly in dyspepsia. I have also used it, combined with sylphium (the Indian cup-plant), in asthma, with perfect success. I use the saturated tincture in alcohol, in doses of 20 to 30 gtt., three times a day. It is a mild antiperiodic also.

POPULUS TREMULOIDES—ASPEN POPLAR.

This tree is too well known to need description, as it is cultivated as an ornamental tree about yards. It has long been used by the people as a tonic in dyspepsia and debility, and doubtless it is much better than many remedies now used as tonics by the profession. I have known of many cases of debility and indigestion relieved by it. It is also a mild antiperiodic, well adapted for chronic ague of long standing. I have frequently used the populus and cornus and the common willow as a bitters to prevent the relapse of old chronic ague, and have generally succeeded in warding it off by the continued use of it for some three or four weeks. But one of the most direct effects of this article is its very positive effects in diseases of the bladder and prostate gland. In cases where the urine contains blood and pus, and there is great tenesmus of the bladder, or painful micturation, populus, in the form of a tincture, in doses of 5 or 10 drops, will generally give immediate relief, if repeated every two or three hours. In inflammation of the neck of the bladder, populus is a positive remedy. In diseases of the bladder, it acts much like the polygonum punctatum. It has but few equals in enlargement of the prostate gland, if any. The tincture should be made of the fresh or recently dried bark; the dose is from 5 to 10 drops in diseases of the bladder, and 30 to 60 drops in ague and dyspepsia.

SANGUINARIA CANADENSIS — BLOOD-ROOT — PUCKOON-ROOT.

Sanguinaria is one of the oldest of the new remedies, yet its value is not fully known. It is a polycræst, possessing a very wide range of action. It puts up in early spring, and blooms very early. It is found from Canada to Florida, in the rich valley lands and along fence-rows, hedges and other protected places. The root is perennial, horizontal, oblong, one or two inches long, and one-half inch in diameter, knotty, fleshy, with numerous radicles, and of a red color. It is quite succulent, and, when cut or broken, it emits a red, vermilion-colored juice, which has an acrid, bitter taste, remaining long in the mouth. Its bloom is white, and it bears many small seeds; and then the leaves decay in summer.

Medical Uses.—It resembles in action *asclepias*, *belladonna*, *bromine*, *bryonia*, *chelidonium*, *drosera*, *iris versicolor*, *phosphorus*, *rumex*, *crispus*, *senega* and *sulphur*. As an external application, the acetic tincture is curative of scaly tetter and many scaly skin diseases. In doses of 15 to 20 grains of the powder, it acts toxically, producing nausea, burning sensation in the stomach, thirst, faintness, vertigo, indistinct vision, and finally violent efforts to vomit, followed by prostration. In very large quantities, it produces death. In moderate doses, it is emetic, diaphoretic and expectorant. It resembles *digitalis* in its action on the heart; but it does not produce its effect on the pulse until it has been taken for four or five days. Prof. Tully says that it unites the properties of *squills*, *ammonia*, *senega*, *digitalis* and *gum guæacum*, without their violent operation. It is peculiarly beneficial in the treatment of diseases of the throat, chest, stomach and liver. It is a very positive remedy in bronchitis, catarrh, influenza, pneumonia, asthma, croup, diphtheria, cynauche maligna or putrid sore throat. It has cured for me many cases of chronic bronchitis, dyspepsia, and benefited jaundice and other liver affections. Drs. Ives and McBride both bear testimony to its value in diseases of the liver. It is very highly spoken of in amenorrhœa, rheumatism and rheumatic gout. Locally applied, it is a good escharotic, and forms the chief part of the cancer plasters of quacks. In small doses, it stimulates digestion, the action of the liver and pancreas; and hence is a valuable remedy in atonic dyspepsia. The sirup, made of the acetic tincture, combined with tincture of *lobelia*, is the most positive remedy for croup, either membranous or spasmodic, that I have used. It may be given until it produces emesis; then the dose lessened so as to keep up slight nausea for a few hours; and, thus given, it has cured many very grave cases of croup for me. The powder, applied to fungus growths, causes their destruction. It is one of the best applications we have to safely and speedily remove fungus growths. I have frequently removed polypi from the nares by applying powdered *sanguinaria* one part, and bayberry one part, and gum arabic two parts, applied on lint once or twice a day;

and, if it prove too irritating to the mucous membrane, it may be modified by an additional amount of gum or sugar of milk. Some writers speak highly of it in sick headache, especially such as occur periodically. It is a very positive remedy for acute and chronic coryza, and for the loss of smell. In catarrh of a chronic character, it may be inhaled or used as a wash with the douche, using a few drops of the tincture to the douche, say 10 drops to a gill of water at first, and, if it produces no irritation, gradually increase up to 20 or 30 drops. In ozena, a snuff made by adding 1 grain of powdered sanguinaria to 1 ounce of sugar of milk, and used as a snuff, will often cure that annoying disease. For internal use $\frac{1}{4}$ to $\frac{1}{2}$ grain of the powder is a dose; the dose of the tincture is 5 to 10 drops; the dose of the sirup 20 to 30 drops.

SANTONINE, OR SANTONINIC ACID—FROM THE LEVANT WORM SEED.

Santonine is a crystalline principle, obtained from the artemisia contra. It is in colorless, pearly, four-sided orthorhombic tables, soluble in four or five thousand parts of cold water, and two hundred and fifty parts of boiling water; freely soluble in alcohol and chloroform; nearly insoluble in glycerine. It is neutral in reaction, but unites with alkalies; on exposure to light, it acquires a golden-yellow color. It should be triturated, one part to nine of sugar of milk.

Medical Uses.—This is a direct poison to any intestinal parasite with which it comes in contact, and at the same time it influences the system of the patient to whom it is administered. It not only removes the parasites, but it relieves the direct and reflex irritations caused by them. It may be given in castor-oil, as it seems to act more directly in that way; from $\frac{1}{4}$ to $\frac{1}{2}$ grain is sufficient for a dose for a child from 1 to 2 years old. It is different from some other parasitocides in that it destroys the life of almost any species of worm, except the tape-worm; it is a certain poison to lumbrici, less so to the oxyuris (pin-worm), and least to tœnia or tape-worm. The triturated article may be given in doses of from 3 to 5 grains, in milk, on an empty stomach, and repeated twice or thrice a day, for two or three days, and it will remove the worms. In cases of oxyuris, an injection may be used, with 2 or 3 grains to 1 or 2 ounces of water, and thrown up the rectum. In large doses, santonine has a peculiar effect upon the eyes, rendering objects blue, yellow or green; but, in moderate doses, it does not produce that effect. It is one of the most certain anthelmintics that we have, for which purpose from $\frac{1}{8}$ to $\frac{1}{4}$ grain for small children, and for children eight or ten years of age from $\frac{1}{2}$ to $\frac{3}{4}$ of a grain may be given, twice a day, on an empty stomach. I usually add from 4 to 6 grains to one ounce of simple sirup, or sirup of pink-root, and give from $\frac{1}{2}$ to 1 drachm twice a day, according

to the age of the child ; then about the third day I give a cathartic of oil, or gallop and senna. And this course is very certain to remove the parasites from their lodging. Santonine also exerts a very decided action upon the bladder and urethra, stimulating contraction of the bladder, and, at the same time, allaying irritation of both the bladder and urethra. In retention of the urine, it is very valuable, generally relieving this trouble promptly. In hyperæsthesia of the bladder, giving rise to irritable bladder, santonine is one of our most positive remedies ; and for this trouble it may be alternated with the tincture of eupatorium, purpurium, or some other good diuretic, to dilute the urine. It has equally as good an effect in cases of irritable bladder of pregnant females, and may be taken by them, in small doses, without danger. The dose varies from $\frac{1}{2}$ to 1 grain for adults ; and for irritable bladder 1 or 2 grains may be given.

PLANTA MAJOR—PLANTAIN—GREEN PLANTAIN.

This well-known yard-plant seems not to have ever attracted the attention of the profession, but has long been used by the people. It grows in yards, rich, moist places, in fields, by roadsides and in grass-plots. It is common in Europe or America ; flowering in May to October. It is perennial, with round stem or scape rising from a fibrous root, from one to three feet high in rich land. The leaves are ovate, smooth, somewhat toothed, five to seven nerved, each containing a strong fiber, which may be pulled out. The flowers are white, very small, imbricated, numerous and densely set on a cylindrical spike, from five to twenty inches long in good ground, but on thin soil they are not over one or two inches long. The stamens and styles are long, and the seed are very numerous, but quite small. The tincture of the fresh root and leaves are used.

Medical Uses.—This plant has some of the properties of arnica and phytolacca, but also other properties peculiar to itself. It is peculiarly nervine, being a very positive remedy for odontalgia or toothache. The expressed juice may be applied on cotton, or a few drops, with glycerine, may be dropped in the ear ; or a saturated tincture of freshly dried leaves may be given internally, in doses of 10 to 20 drops, repeated every hour or two until relief is obtained.

In domestic practice, it has always been in high esteem for affections of the skin, such as bruises, cuts, prurigo, urticaria and populæ, the leaves being wilted and applied to the affected part. And there is certainly great power in it in such cases, for it readily relieves pain, and lessens the inflammatory excitement in such affections. There are many cases of erysipelas, rhus-poisoning, erythema, burns, scalds, inflammation of the mammae, bruises, incised wounds, bites of animals, frost-bites, chilblains, etc., which have been cured, or much relieved, by the local application

of this plant. And the physician should not disdain to apply this humble plant to such cases because the people use it. It fills its place in the list of remedial agents, and should not be overlooked because it is so common. It is reported to be very valuable in dysentery, summer complaint and cholera infantum; also, in enuresis, especially nocturnal enuresis. The application of the wilted leaves relieves the pain of mastitis very promptly. A young man cut his thumb through the nail; it was dressed and treated with the usual means for three weeks; it then inflamed and swelled fearfully, and became very painful; the tincture was given internally, and applied to the cut, and it was cured in a short time. And there were several other similar cases cured with it. It is doubtless a valuable remedy. Will some of our pharmacists make an extract?

SENECIO AUREUS AND SENECEIS GRACILIS—LIFE ROOT —FEMALE REGULATOR.

This plant is called by various names, as ragwort, false valerian, squaw-weed, and golden senecio, etc. The Indians called it *uncum*, by which name it is supposed they meant female regulator. It has an erect, smooth, straight stem, one or two feet high, flobose-woolly when young, simple or branched above, terminating in a kind of umbellate, simple or compound corymbo. The radical leaves are simple and rounded, the larger ones mostly cordate, crenate-serrate, and long petioled; the lower leaves are cauline, lyre-shaped; the upper ones, few, slender, cut-pinnatifid, detate, sessile or partly clasped; the terminal segments lanceolate; peduncles subumbellate and thick upwards; corymbo umbel-like. The rays from eight to twelve, four or five lines long, spreading. Flowers golden yellow. Scales linear, acute and purplish at the apex. The *senecio gracilis* is merely a taller variety.

Medical Properties.—This plant took its common name, female regulator, from its power over some female irregularities. Its sphere of action is mainly upon the mucous and nervous system. It has an affinity for the generative organs of both male and female; also the urinary organs and mucous membrane of the bronchial tubes. It possesses marked nervine properties, and upon this peculiar regulating power over the nervous system are to be attributed its benign effects over female irregularities and some urinary troubles. It very readily subdues irritation of the uterine organs; and in this way cures many female diseases. It is in common use by the people for nervousness, hysteria, lowness of spirits and sleeplessness, acting in this condition much like *scutillaria*. It acts on the mucous tissue very much like *pulsatilla*; hence, it checks abnormal, mucous discharges from the bronchial tubes, intestines and vagina. It is a remedy in catarrhal affections, such as profuse leucorrhœa and bronchorrhœa. It has cured chronic nasal catarrh. It is used with good effect in painful

micturition and other difficulties of the urinary organs. I have used it frequently in such cases, with happy effect. I have also used it often in irregular, profuse and painful menstruation with success. In anasarca attending chlorosis, or attacks attending the climacteric period, it is peculiarly beneficial. It is also valuable in ovarian dropsy, or dropsy occurring from suppression of the menses. It is a female remedy of rare virtue, and one that may always be given without risk, provided it is not given in too large quantities. It, like many other remedies, has a secondary and primary effect, and should not be given in too large doses. The dose of the fluid extract is 20 to 30 drops; the tincture 30 to 60 drops, three times a day. The senecin may be given in doses of 1 to 2 grains.

STICTA PULMONARIA—LUNGWORT.

This is a lichen, which grows on the trunks of trees, and on rocks in New England and New York, and also in Pennsylvania. It is a singular-looking growth.

Medical Uses.—It has acquired considerable reputation recently in diseases of the air-passage. It is certainly curative of catarrhal affections. In harrassing coughs, I have used it with good effect. It does not seem to increase the expectoration; hence, if that is deficient, it must be alternated with sanguinaria or some other good expectorant. It has acquired considerable reputation in acute rheumatism; but I have not tested it sufficiently to pronounce an opinion in regard to it yet. It has a specific influence over hay-fever, and those attacks of influenza that appear as epidemics in the spring and fall. Whenever the attack is characterized by a very profuse flow of hot, irritating, watery mucous, the sticta will prove positive in its effects. It is also a good remedy in ozæna, and may be alternated with the iodide of arsenic, and the permanganate of potash used with a good douche locally. It relieves the cough of bronchitis and laryngitis, and even in phthisis. I use the saturated tincture, made in diluted alcohol (70°), or the tincture made with water, alcohol and glycerine, equal parts; dose, 20 to 30 drops every three hours, or oftener if the case is a grave one.

MAY APPLE OR MANDRAKE—PODOPHYLLUM PELTATUM.

PODOPHYLLIN IS NOW MOSTLY USED, DOSE $\frac{1}{4}$ TO 1 GR.

Podophyllum is a very certain cathartic and colagogue. It produces also an alterative effect, or it sets up catalysis in the system, and decomposes effete or poisonous materials, and aids in carrying them out of the system; hence, it is a good remedy in syphilis, jaundice, and many other diseases. It is capable of quite an extended range of action. It has a specific affinity for the liver,

and hence, is the remedy in torpidity of that organ, or in chronic hepatitis, jaundice, and morbid action of the liver. It is a valuable cathartic in dropsy, constipation, affections of the brain, and congestion of the spinal marrow. It is valuable in incontinence of urine and other affections of the bladder. In glandular enlargements it is of singular efficacy. The dose of the powder is from 15 to 30 grs. ; the dose of the fluid extract, 15 to 20 gts. ; dose of the tincture, 10 to 30 gts.

SILPHIUM LACINIATUM—RESIN WEED—COMPASS PLANT.

This is a large prairie plant, growing in Illinois and Wisconsin : from thence, southward and westward. It flowers in July. In the prairies, the leaves present their edges northward and southward. The plant is very rough and bristly, with a stout stem and pinnate leaves, petioled and clasping at the base ; hence called the cup-plant. The heads are few and somewhat racimed. The tincture of the leaves and root are used. It yields its virtues to alcohol (96°).

Medical Uses.—This plant contains a large per cent. of balsamic and resinous juice, upon which its virtues largely depend. It has proved for me one of the best of remedies in humid asthma. I have made several very brilliant cures with the tincture of this plant and the tincture of *ptelia trifoliata* alternated, given in doses of 30 drops, each, four times a day in simple elixir. It cures horses of heaves by simply eating of the leaves, of which they become fond very soon. It has a specific effect upon the mucous surface, much like balsam of Peru, and is curative of such diseases as gonorrhœa and gleet. In acute forms of disease of mucous membranes, the dose should be small ; say, 5 to 10 drops, but in the chronic form of inflammation, the dose may be 30 or 40 drops of the saturated tincture. It is a valuable remedy in chronic bronchitis and trachitis. It will soon become a popular remedy in mucous diseases.

SEMPERVIVUM TINCTORUM—HOUSE-LEEK.

This plant has a fibrous root, with several tufts of oblong, acute, succulent leaves, on a central stem, some six to twelve inches high, generally erect, and round and downy ; the flowers are large, pale-rose-colored, and odorless. It is a native of Europe, but cultivated in the United States. It flowers in August. It is often grown in the house, or in boxes as an ornamental plant. It is so succulent that it will grow in the shade without the root. The leaves contain the super-malate of lime.

Medical Uses.—This singular little plant has never been used as a medicine much by the medical profession, but deserves more attention than it has ever received. The people use the leaves.

fresh, as an application to bruises, burns and to erysipelatous affections, stings of insects. The leaves sliced and applied to warts will finally destroy them. The juice or strong infusion may be applied to many inflamed skin affections with positive curative effect. It is stated that it has cured tumors of the tongue, resembling cancer of the tongue. It is also stated by one writer that it has cured an ulcer of the tongue three-fourths of an inch deep. It is also highly spoken of as an application to ulcers with raised edges, discharging greenish pus. One writer recommends it for ringworm and shingles. It certainly is worthy of investigation.

SURRACENIA PURPUREA — PITCHER-PLANT — HUNTS-MAN'S-CUP.

This plant is called side-saddle flower, fly-trap and pitcher-plant. It is indigenous, perennial, and is in appearance a curious-looking plant; the leaf, which is rather pitcher-shaped, curls up, which then resembles an old-fashioned side-saddle. It has five or six leaves to the plant, and they spring from the root; are formed by large, hollow tubes, swelling out in the middle, curved and diminished downward, until they end in the stem, contracted at the mouth, and furnished with a large, spreading, heart-shaped appendage at the top, which is hairy within, the hairs pointing downward, so as to cause every thing that falls upon the leaf to be carried down toward the petiole. A broad, wavy wing extends the whole length of the leaf, on the inside. They lie upon the ground, with their mouths turned upward, so as to catch water as it falls. They hold about a wineglassful, and are generally filled with water and insects, which undergo decomposition, and serve to nourish the plant. It has an erect stem, and bears reddish, purple flowers, having two flower-cups.

Medical Uses.—This plant has been recommended in small-pox, and also as a prophylactic against the attack. I have never used it in small-pox; but, from the many favorable reports of its superior power over the disease, I doubt not that it is worthy of a trial. It has been used in the form of decoction, in doses of 1 to 2 ounces; the surracin, in doses of 1 to 2 grains, as often as needed.

OLEUM SANTALUM—OIL OF SANDAL WOOD.

The oil of sandal wood is extracted from the wood of the *santalum album*, a tree found growing in India. There are worthless imitations, and it is difficult to procure a pure article. When pure, it has a direct and well marked affinity for the mucous tissue of the urinary organs. It was first used in gonorrhœa, by the physicians of the East, and from their success the remedy has

now reached the United States. The Eastern physicians consider it valuable in the treatment of all mucous diseases, especially those of the respiratory and urinary organs. It is believed to be superior to copaiba, cubebs, oil of erigeron, or turpentine, in the treatment of gonorrhœa. I have used it considerably, but only in very obstinate and chronic cases, as its cost is much more than other remedies of its class. In those cases in which I used it, I thought it a superior remedy in gleet and gonorrhœa. I have used it in one or two cases of leucorrhœa, but did not think that it was as good as some other mucous remedies. It is worthy of further trial; and when the price comes down, I think it will be more used. The dose is from 5 to 6 drops, three times a day, in mucilage or milk.

POLYPORUS OFFICINALIS—BOLETUS LARICIS.

This is a fungus growing on the larch-tree in all countries where that tree is found. It grows in masses from the size of an apple to that of a nutmeg-melon. It contains about 72 per cent. of a resinous matter, some benzoic acid, and various saline compounds. The Indians of the Rocky Mountains use it as a purge; 20 or 30 grains acting as a cathartic.

Medical Properties.—The polyporus officinalis is used successfully as an antiperiodic. It is thought to be most successful in old chronic chills, that have relapsed after the use of quinia for some time, though it often proves very prompt in cases at the outset. In the Northwest, physicians use it a good deal; and they say that it is successful in about ninety-five per cent. of cases of chills and fever. It is also a valuable remedy, in small doses, in bowel complaint, checking the purging in a few hours. It also cures periodical headache and propolagia of an intermittent character. It also has a very beneficial influence over the liver, and has frequently cured jaundice, in which affection it resembles in action the chionanthus virginæa. It has also acted well in dysentery and diarrhœa in malarious localities, especially when complicated with remittent fever.

The most convenient form for use is the saturated tincture, the dose of which is from 10 to 20 gtt.

SCROPHULARIA NODOSA—FIGWORT.

Scrophularia has a perennial, whitish, fibrous root, with erect, leafy, smooth stem, from two to four feet high. The leaves are opposite, ovate, the upper ones lanceolate, acute, and of a deep-green color, some six to seven inches long. The flowers are small and of a dark, purple color. The fruit is an ovate-oblong capsule. This plant is found in Europe and America, growing in woods, hedges, on banks and in damp copses, blooming from July to October. It is called carpenter's-square, heal-all, etc. There

are two other varieties; that is, the *scrophularia marilandica* and *lanceolata*, but they are all supposed to be identical in property. The leaves and root are officinal, and yield their virtues to water and alcohol.

Medical Properties.—This plant is alterative in the true sense of that term. It not only has the power to disintegrate and disengage morbid materials, but also acts as a diuretic, and thus eliminates them from the system. It is peculiarly beneficial in scrofula and scrofulous skin diseases. I have used it extensively and internally in scrofula, alternated with iodine and rumex; and have cured many grave cases of scrofula with this and other combinations, such as *corydalis* and *stillingia*, etc. The dose of the tincture is 1 to 2 drachms. It is a valuable remedy in strumous constitutions.

TRILLIUM PENDULUM—WHITE BETH-ROOT.

This plant has a tuberous, oblong root, from which arises a slender stem, from ten to fifteen inches in height. The leaves are three, whorled at the top of the stem, sub-orbicular, rhomboidal, abruptly acuminate, from three to five inches in diameter, on petioles one line in length. The flowers are white, solitary, terminal, cernuous, on recurved peduncle, from one to two inches long; sepals green, oblong-lanceolate, acuminate, and are an inch long. The petals are white, oblong-ovate, acute, one and one-fourth inches in length by one inch in breadth; styles, three, erect, with curved stigma. It grows in the most parts of the Middle and Western States, in rich soil, in damp, rocky and shady woods, and flowers in May. There are several species of this plant, as the *trillium erythrocarpum*, *trillium grandiflorum*, *trillium sessile*, *trillium erectum*, and *trillium nivale*, are the most common, and most frequently collected and used, and are regarded similar in property. They may be known by their three verticillate, net-veined leaves, and their solitary terminal flower, which varies in color in different species, being white, red, purple, whitish-yellow or reddish-white. They are called by the common names of wake-robin, birth or beth-root, Indian-balm, ground-lily and lamb's-quarter. The *trillium pendulum* is the one that is reliable as a remedy in hemorrhage, and should always be selected. The roots, chewed, imparts an acrid, astringent impression in the mouth, causing a free flow of saliva in the mouth, and a sensation of heat in the throat and fauces, but have a rather aromatic taste.

Medical Effects.—*Trillium* is one of those remedies, like *hamamelis*, that has an affinity for mucous membranes and the capillary vessels. Like all active anti-hemorrhagics, it possesses more or less influence over the vaso-motor system of nerves. In large doses, it checks hemorrhages from the lungs, nose, uterus and bowels; and in smaller doses, continued for some time, it checks passive hemorrhages and mucous discharges. Prof. Lee states

that it is one of our most valuable tonics, astringents, alteratives, and especially beneficial in most cases of passive, atonic hemorrhages, as monorrhagia, epistaxis and hemoptysis. Less astringent than many other articles of this class, nevertheless it is tonic and alterative; hence, has decided efficacy as an astringent, when such an article is indicated. Dr. Williams used it in the form of the powdered root in all active hemorrhages, in doses of 1 drachm, repeated according to the urgency of the symptoms. Dr. Stone, of Massachusetts, has used it extensively in all forms of hemorrhages, especially from the uterus and lungs, and states that it is decided in its action in those hemorrhages. He also states that he has derived good effects from it in scrofula, and in some cutaneous diseases. It has been used in cases of tardy labor, and is believed to hasten parturition; hence its common name, "birth-root." The Chippewa Indians, on Lake Superior, used it extensively to facilitate parturition; they used it also in the bite of the rattlesnake; and it seemed to be their favorite remedy in female diseases. It is a valuable remedy in vaginal leucorrhœa, checking the discharge, not so much as a mere astringent, but by exerting a tonic and alterative impression upon the glands and mucous vessels. In passive bronchorrhœa and hemoptysis, it very positively influences the mucous tissues, controlling the hemorrhage in the one case and the mucous discharge in the other. It possesses antiseptic powers, and, as such, may be used whenever a mild remedy of that class may be needed. Hemorrhages from cancers, ulcers and suppurating wounds may be checked by the local application of the powder of the trillium. It is also applicable in melæna, or where there are discharges of dark blood from the bowels; also in dysentery, after all inflammation has been subdued, and there is still a discharge of dark blood. It not only checks hemorrhage, but it has proven successful in diabetes, in which disease it may be alternated with *lycopus virginica*. It has been supposed that trillium owed its power over hemorrhage to the tannin it contained, but I cannot account for its active hemorrhagic powers, for there are several other articles that contain a larger per cent. of tannin than it does, yet they do not possess the same power. It has gained great popularity in the cure of uterine hemorrhage. Dr. Wheeler reports some cases of hemorrhage, with threatened abortion, that readily yielded to its powers. Dr. Chamberlain, of New Hampshire, reports favorably of it in active hemorrhage from the uterus, in doses of 20 to 30 grains. The dose of the tincture is from 30 to 60 drops; the dose of the fluid extract is from 20 to 30 drops.

SULPHATE OF NICKEL—NICCOLI SULPHAS.

The sulphate of nickel is formed by adding the carbonate of nickel to dilute sulphuric acid, concentrating the solution, and

then letting it crystallize. It forms in emerald-green crystals, efflorescent in the air, and dissolves in three parts of water, but insoluble in alcohol or ether; has a sweet, astringent taste. It may be triturated, 1 part to 9 of sugar of milk, or dissolved in water for use.

Medical Uses.—This article resembles arsenic in its action, both toxic and therapeutic. In some respects, it resembles zinc and bromine in its action. It is a valuable remedy in neuralgia; also in sick or nervous headache. It should be given in doses of $\frac{1}{4}$ grain every hour or two while the attack lasts, and then in smaller doses in the interval, say $\frac{1}{8}$ grain three or four times a day until it cures the disease. Many cases are on record where it has proven successful in making a final cure. As a remedy in neuralgia, it has but few equals. Mrs. ——— had suffered with neuralgia for more than three years, and for the last three months the paroxysms had been very severe and occurred very frequently. She had been treated with iron, quinia, strychnine, colchicum, aconite, morphia, zinc, valerian, chloroform and electricity, with only temporary relief. She then had three doses of the sulphate of nickel per day, $\frac{1}{2}$ grain to the dose, and in less than a week the paroxysms were reduced to about one in the twenty-four hours, and finally disappeared entirely. It produced sound and refreshing sleep, and seemed to ease the pain sooner than morphia. I have used it myself for sick headache, and find it a superior remedy. The dose is from $\frac{1}{8}$ to $\frac{1}{2}$ grain, three times a day.

SCUTILLARIA LATERIFLORA—SKULL-CAP.

Scutillaria lateriflora has an erect, branching stem, quadrangular, nearly glabrous, with a small, perennial, fibrous root. It grows to the height of one to three feet, with opposite branches. The leaves are on petioles about an inch long, opposite, thin, entire, nearly membranous, subcordate on the stem, ovate on the branches, acuminate or acute, coarsely serrate, and slightly rugose. The flowers are small, of a pale-blue color, and disposed in long, lateral, axillary racemes, with ovate, acute, entire, subsessile, distichous bracts, each flower axillary to a bract and pedunculated. The calyx has an entire margin, which, after the corolla has fallen, is closed with a helmet-shaped lid. The tube of the corolla is about a quarter of an inch long, the upper lip concave and entire, the lower one three-lobed. The seeds are four, in a closed calyx, oval in shape, and verrucose. It grows in many parts of the United States, in damp places, and flowers in July and August. It should be gathered while in bloom and dried in the shade. Alcohol and water take up its virtues.

Medical Uses.—*Scutillaria* resembles valerian and cypripedium in action on the nervous system. It has a calming and sedative effect upon the nervous system, perfectly charming in many

conditions of perturbation and excitement of that system. Dr. Barton, and many eminent physicians of his time, extolled it highly in nervous diseases; but from some cause it has never received its merited attention, and that is why I introduced it among new remedies. It is tonic, antispasmodic as well as nervine; consequently, often preferable to opium, which though very quieting, yet it so depresses the digestive organs, locks the secretions and leaves such unpleasant effects that it is often better substituted by scutillaria or scutillarin. It has proven especially useful in chorea, convulsions, tremors, neuralgia, nervous chills, and all nervous affections. In delirium tremens, an infusion drank freely will produce calm sleep and quiet the excited nervous system. It is also one of our best nervines in that excited state consequent upon teething. In such cases I have seen it act like a charm. In that depressed condition of the nervous system following long continued study, or spells of exhausting diseases, it is one of our best calmatives and nerve tonics. It had once a reputation as a remedy in hydrophobia, so much so as to have given it the name of "mad-dogweed." It is a valuable remedy in chorea and hysteria, often quieting those peculiar nervous affections very promptly. It appears to impress the gray nerve tissue, and hence it is adapted to those diseases which originate in pathological conditions of that tissue. The above fact accounts for its specific effect in chorea. It may be given, alternated with its analogue-cypripedin, in typhoidal diseases, where the gray nerve tissue has undergone more or less degeneration from the effects of zymosis, or where the nerve power is impaired by pathological changes, as in subsultus tendinum, delirium tremens, and other spasmodic manifestations. It has a very beneficial effect in epilepsy, catalepsy and spasms of children. Many cases of epilepsy are reported as cured by giving the scutillarin in three-grain doses, alternated with iron, every three hours. Some writers speak very favorably of scutillarin in *coup de soleil*—sun-stroke. In those diseases of young children, where there is sympathetic or idiopathic irritation of the nerve centers, it acts remarkably well. In sleeplessness, night terrors, nervous agitation, exciting emotions, cerebral irritation from teething or intestinal reflex irritations, it acts very kindly and promptly. It is much better to use it in excited states of the nervous system than to use opium, as so much has been the custom. The dose of the tincture, 1 or 2 drachms; the dose of the scutillarin, 1 to 3 grs.; the infusion may be used in doses of a tablespoonful.

SOLANUM NIGRUM—BLACK NIGHTSHADE—AMERICAN BELLADONNA OR NIGHTSHADE.

This plant belongs to the natural order solanaceæ—the nightshade family. It has a low, branching stem, nearly smooth, spreading and inclined to droop. The leaves are ovate, wavy-toothed

or sinuate, and generally perforated by insects; the edges frequently erased by insects, so much so that it is difficult to find a sound leaf on a plant. The flowers are white, small, with yellow anthers, lateral umbels, drooping, five parted, on bractless pedicels. The berries are black when ripe, globose, and of a sweetish taste. It begins to bloom in June and continues until frost; hence, it has ripe and green berries and blooms on it at the same time. The whole plant has a very disagreeable narcotic odor, somewhat like that of the tomato. It grows in gardens, fence corners and near walls, in shady situations.

Medical Uses.—This plant resembles its twin-sister, the belladonna, in action, and for some purposes, it is preferable. It has a specific tendency to the brain and spinal system. In cerebral and cerebro-spinal meningitis, it is a valuable remedy, if given early in the disease, before there is organic lesion of these great centers. It has a direct curative effect in ordinary frontal headache from repletion or congestion, as it, like belladonna, has the peculiar power to contract the caliber of the capillary vessels of the brain, thus relieving the pain. It is also a remedy in angina pectoris, alternated with the tincture of cactus grandiflorus or the cereus bonplandi. In ophthalmia and amaurosis, I have derived great advantage from it. In these affections, I drop a few drops in a teaspoonful of water, and drop a little of this diluted tincture in the eye, which immediately begins to contract the capillary vessels, and thereby remove the inflammation. It has a very controlling effect upon spasms, especially the convulsions attending teething in children. It likewise has an equally good effect in puerperal convulsions, and given in time, they may be warded off by its use. In scarlet fever it, like belladonna, is both a remedy and a prophylactic against its invasion. It is a valuable remedy in many inflammatory brain affection, such as insanity of an acute character, etc. In typhomania that attends typhoidal diseases, it acts charmingly, quieting the brain and removing the typhomania in a few hours. I am using it frequently where I have been accustomed to use belladonna, and find it equally as prompt in action; then we have this advantage, that we can always get it fresh. The dose is from 5 to 10 drops of the saturated tincture of the fresh plant, every three hours.

STILLINGIA SYLVATICA—QUEEN'S DELIGHT—YAW-ROOT, SILVER LEAF, ETC.

This plant is indigenous, perennial, with herbaceous stems, growing from two to three feet high. The leaves are alternate, sessile, oblong or lanceolate-oblong, obtuse, serrulate, tapering at the base, and having stipules. The male and female flowers are distinct upon the same plant, and are yellow, and arranged in the form of a spike, of which the upper part is occupied by the male and the lower by the female flowers. It grows in sandy land and

pine barrens from Virginia to Florida, and in Mississippi and Louisiana; flowering from April to July. The plant contains a milky juice, which is rather acrid to the taste. The root is long, which is the officinal part, and large, woody, wrinkled when dry, externally of a dirty-yellow color, and exhibiting, when cut across, an interior soft, yellowish, ligneous portion, surrounded by a pink-red bark. The taste is acrid in the recent root, and leaves a sense of pungency in the throat for some time. It imparts its virtues to water and alcohol. It is worthless when old.

Medical Properties.—This plant resembles that of *phytolacca* in action. It is curative of chronic rheumatism of a syphilitic, periosteal character, and ordinary chronic rheumatism. It resembles also iodide of potassa in its action; hence, it is a very valuable remedy for tertiary syphilis. It has a direct action upon the lymphatic and upon the periosteum, and has often cured bony tumors on the head and face (exostoses), and about the limbs. A little girl, who had enlargement of the tibia to such an extent as to deprive her of the power of motion, with enlargement of the bones in other parts of the body, took infusion of *stillingia* and improved rapidly under its use. It is valuable in secondary syphilis, and aids other alteratives in the final cure of the disease. I have frequently tested its powers over that disease; and I can safely say that there are but few, if any, remedies equal to it in secondary syphilis, and it is equally potent in tertiary syphilis. The primary chancre may be treated with the local application of the chloride of gold and soda, followed by the chloride of iron, and the *stillingia* and *corydalis* given internally, or the *stillingia* and *phytolacca* given, and it will seldom be necessary to give any other remedies. With the above remedies, I have often removed every trace of the disease from the system, and the patients are now living to bear testimony to the fact. I know that there are many of the profession who do not believe this statement, but it is now being proven by many physicians in the West. To those who will not test the above remedies, and will use the mercurial treatment, it is useless to argue with them, but all who will try them will find them very active. In cases where the chancre is indurated, the internal administration of chloride of gold and soda and the local application of iodoform to the chancre, will combat the secondaries. But those who will still use the old remedy, mercury, let them use the following less injurious preparation of it; that is: Iodide of potassa, 2 drachms; mercury bin-iodide, 2 grs.; simple syrup, 8 oz.; mix; dose, 1 teaspoonful four times a day. If the disease is properly treated from the first, there will seldom be any tertiary symptoms. The ordinary preparations of mercury are apt to produce what are commonly considered the tertiary effects, but combined, as above, with iodide of potassa, it is almost impossible for the mercury to produce its poisonous effect, if not given too long, as the iodine conveys it out of the system. But I have found the compound

sirup, or the tincture of phytolacca, corydalis and stillingia, alternated with the iodide of potassa, to cure the disease without any preparation of mercury. In all chronic, syphilitic eruptions, scaly and obstinate in character, stillingia is one of our most trustworthy remedies. In congenital syphilis it often acts better than iodide of potassa. The dose of the tincture of the fresh root is 20 gts. ; the dose of the fluid extract from the fresh root is 10 to 15 gts.

USTILAGO MAYDIS—MAIZE SMUT.

The smut of the Indian corn is a fungus that appears on the stem and germs of the forming ears. When dry, it is a black, dusty powder, much like lamp-black or soot. Analysis of this fungus shows it to contain a large per cent. of ergotin. It should be tinctured as soon as it has matured, or it loses its ergotine and is worthless. It may also be triturated with sugar of milk, and kept for use in closed jars or bottles.

Medical Uses.—Although it contains a large per cent. of ergotine, yet it is somewhat different from that article in its action ; but it has similar effect (in large doses) upon the impregnated uterus to that of ergot. It was first brought to the notice of physicians by its producing abortion upon cattle fed upon corn containing large quantities of the fungus. Its action upon the uterus is as positive, and perhaps more powerful, than that of ergot. Prof. Tulley says it has the power even to cause hens to cast their eggs before the shell has formed. It has caused bitch dogs to abort with their young, requiring about six drachms to produce the effect. Although it thus produces abortion, yet it is not identical with ergot, for it contains other active principles not found in ergot. It is not perhaps as active as ergot as an abortifacient, but in chronic or passive hemorrhage, ustilago is claimed to be superior to ergot generally. It seems to exercise a special influence over the vessels of the generative organs. It acts on the spinal cord in a similar way to ergot, but not as intensely. It affects the trophic nerve-cells in a special way. The long-continued use of it, in large doses, has been known to produce a toxical effect upon the skin, especially that of the scalp ; causing an eruption, discharging a watery serum, matting the hair together, and causing its fall ; yet it has been given for a considerable time without this result. It is stated, however, that it has caused mules to shed their teeth, hair and hoofs ; hence it is evident that it does have a direct effect upon the dermoid tissues not possessed by ergot. Its specific effect upon the generative organs is apparent ; it has cured irritabile testes, chronic induration and spermatorrhœa. It also exercises a special influence over the ovaries ; and hence it cures menorrhagia and metrorrhagia ; also post-partum hemorrhages. I have used it in quite a number of cases, in good round doses, for

menorrhagia, both active and passive; in the passive form, however, I use it in smaller doses than in the active form. And I find it will often check the hemorrhage where ergot fails. I have not used it as a parturient in the place of ergot, nor would I, unless I could not get the ergot. I think it is inferior to ergot as a parturient, but superior to it as an anti-hemorrhagic, especially in the passive form. I have used the saturated tincture, and also the triturated article. The dose of the tincture, in hemorrhage, is from 30 to 60 drops; the dose of the powder, 20 to 30 grains, in hemorrhage.

URTICA URENS—STINGING NETTLE.

This well-known plant has perennial roots, and grows in Europe and America, by road-sides, in fields, hedges and in gardens. It is armed with very fine hairs, barbed with free formic acid, possessing an irritating property, which produces a stinging and itching impression upon the flesh wherever the leaf or stem strikes it. The root and plant are the parts used for medicinal purposes.

Properties.—This plant has been found to cure urticaria (nettle-rash), used internally and locally, in the form of a tincture. It is positive in urticaria, characterized by elevation of the skin, with white central spots and red areolæ, and attended by a burning and stinging sensation. It is also very useful in urticaria, where the eruption recedes, and causes vomiting, fainting or diarrhœa, as it sometimes does. It may be used for strangury, gravel, dysentery, hæmaturia, enteritis, and the suppression of the milk in females nursing. It is also a valuable remedy in hemoptysis and menorrhagia and other hemorrhages. It has a specific influence over the capillary circulation, the mucous membranes, and seems also to have considerable power over arthritic forms of inflammation, as it has cured some cases of rheumatism. There are cases also on record where the seeds have cured goitres; hence, there seems to be an alterative effect possessed by the seeds. It is a very positive remedy for urticaria and strangury, and is worthy of more attention than it has received. The tincture may be used in doses from 20 to 30 gtt. every two or three hours, made of the whole plant.

VERATRUM VIRIDE—SWAMP HELLEBORE—INDIAN POKE—ITCH-WEED.

The veratrum viride is indigenous to the United States, usually growing in damp meadows. It flowers in May and June. The root is the officinal part, and consists of a tunicated top, with a thick, fleshy base, having many radicles attached. It contains veratria, gallic acid, and extractive, etc. The veratria is the active principle. Dr. Tulley considered it deobstruent and alterative, and an active narcotic and emetic. It is only emetic in very large

doses, and this is its toxic effects. *Veratrum viride* is one of our most direct and powerful arterial sedatives. It promptly influences the sympathetic nervous system, especially the pneumogastric branch, and, through it, it lessens the action of the heart very promptly. To obtain this result, the remedy need not be given, as it has too often been, in large doses, but in small doses, frequently repeated. It is true that *veratrum*, given in large doses, speedily reduces the circulation: but it proves too depressing, and there is always danger of its producing violent and prolonged vomiting; and, where it is long continued, in large doses, there is danger of its producing such impairment of the heart's action as to result in congestion. And there is great liability, where it is continued in large doses, of its producing such irritation of the stomach that the remedy can not be tolerated, and then it has to be discontinued entirely. In all fevers and inflammations, accompanied with *sthenia*, with a free and frequent pulse, *veratrum* will do good service. In remittent and intermittent fevers, characterized by an active state of the capillary circulation in the acme of the fever, *veratrum* will control the excessive action of the heart: and, where there is determination to the head, it may be given with, or alternated with, *gelsemium*. In diseases of the serous tissues, attended with a free, full, hard pulse, *veratrum* will be found to act promptly. In pneumonia of a *sthenic* type, this is the remedy indicated: and, if given early in the attack, will frequently cut it short in the first stage of engorgement. In cases of inflammation, of not only the lungs, but of the other organs and tissues, *veratrum* directly tends to their cure, by its very prompt control of the circulation. I have found it as prompt in acute rheumatism as in other forms of inflammation, if alternated with alkalies to neutralize the excess of acid in the blood. It is a good remedy in some chronic diseases, as it increases excretion and improves nutrition. I use the tincture, as prepared by Norwood: 8 ounces of the root to 1 of alcohol. Dose from 1 to 3 gtts.

The tincture should be made of the fresh root, and, if green, just covered with alcohol (76°), steep 12 to 14 days, then strain and filter. Thus made, it will be of uniform strength, which is always desirable to the practitioner. I have been in the habit of making all my tinctures, for ten or fifteen years, after the above rule, and have succeeded in practice much better with such tinctures, as I know then what quantity of the medicine I am giving; and no man can know how to give a medicine unless he knows its strength. The dose of *veratrum*, as commonly made, is from 5 to 8 drops. Of the above tincture, the dose need not exceed 2 or 3 drops. In pneumonia, I sometimes give as high as 3 drops every two hours, but generally not more than from 1 to 2 drops; to children, from $\frac{1}{4}$ to $\frac{1}{2}$ drop. In rheumatism, I usually give 1 or 2 drops, every four hours. To get the medical effects of an arterial sedative, we need not produce the toxic effects of the remedy, but merely the medical impression. I have frequently seen physicians

get into trouble by giving this article in excessive doses. In small doses, say $\frac{1}{2}$ drop, veratrum is a stimulant to the vegetative processes, by removing obstruction to the circulation, especially the capillary circulation. It is one of those remedies that may be depended upon in all active inflammations, but is often given where it is not indicated, and where it does actual harm. It should never be given in typhoidal diseases, where there is a small, feeble pulse, even if it is quick for such a pulse indicates feebleness of the heart—an inability to propel the blood with sufficient force so as to reach the capillaries—and veratrum would only increase the difficulty. But in the above condition, aconite, alternated with belladonna, if there be typhomania, will be the remedy, and should be given in small doses. In overdose, veratrum causes coma, somnolency, dimness of vision, dilatation of the pupils, vertigo, headache (from congestion), impaired muscular action, general numbness, slow and infrequent respiration, hiccough, a pale, cold skin, clammy sweat, persistent vomiting, pain in the pæcordia, profuse watery purging in some cases, a small, infrequent and feeble pulse. But these effects may be counteracted by the timely administration of stimulants.

Veratrum acts as a cerebro-spinal and cardiac depressent; and, continued too long, or given in overdoses, it causes compound paresis of the whole circulatory system; and, if still continued, it produces a profound paralysis of the cerebro-spinal and reflex-motor nerve-centers. Its action on the heart is reverse to that of digitalis. It acts so profoundly upon the heart, through the cardiac-ganglia, that, when continued to a fatal extent, the heart, after death, is found relaxed and full of coagulated blood. Its action upon the spinal cord is the reverse of strychnia, for it primarily paralyzes the spinal cord and the reflex-motor nerve centers.

It is a remedy of great power in pneumonia, if it be properly given; but, if improperly given, it is one that does great harm. Prof. Charles Adams examined the lungs of animals that had been poisoned with veratrum, and he found intense congestion, and even many of the capillary vessels ruptured in the lungs, and sections of the lungs so hepatized that they sunk in water. This result was brought about by the profound paralysis of the capillaries, resulting in the very condition found in pneumonia. This is conclusive evidence that this article should never be given where there is any tendency to congestion, or where the heart is already enfeebled by existing disease, as it is often in typhoid fever. It is not applicable in the stage of red and gray hepatization, softening and suppuration, and it would only aggravate these conditions and prolong the disease, if not hasten a fatal termination. But in the first stage—the stage of active reactionary force of the heart—veratrum comes in as our sheet-anchor, and will control the heart's excessive action better than any remedy we have. It is a remedy for convulsions, given in full doses, especially for puerperal convulsions. It is now believed by pathologists that the convulsive

center is in the floor of the pons varolii, the fourth ventricle; and veratrum directly impresses that part of the brain so as to suspend that morbid condition. In the forming stage of typhus, with hot skin and full, strong, bounding and quick pulse, veratrum, given in one or two-drop doses every half-hour or hour, seldom fails to control the circulation, and thereby to lessen the fever.

In all fevers, attended with a hard, full, quick and bounding pulse, we may rely upon this remedy to reduce the circulation, thereby to reduce also the heat; and hence, to aid in the final cure, of course we must give anti-periodic remedies, in periodical forms of fevers, but veratrum will procure a more perfect remission for the administration of the quinidia, etc. If the pulse, however, is quick, full, large and soft, gelseminum is the remedy indicated. But if the pulse is small, quick, hard, sharp, but feeble, aconite is indicated. There are a great many cases of rheumatism reported as cured by veratrum viride, and it seems to do good in those cases attended with an excited state of the circulation and extreme pain. It seems to exert a specific influence over diseases of the mucous tissues. Many cases of chronic bronchitis and catarrh are reported as cured by inhalation of dilutions of the tincture, or it may be triturated with sugar of milk and used as a snuff twice or thrice a day, alternated with a snuff of trisnitate of bismuth 1 part and gum acacia 8 or 10 parts, used also as a snuff. In scarlatina, it is one of our best remedies, and may be alternated with belladonna. In idiopathic orchitis, its internal use, with its local application, often cures the disease. In mastitis, veratrum, alternated with phytolacca, will generally succeed in giving quick relief. As regards the dose, much discrepancy of opinion prevails; but if we use the saturated tincture, from 1 to 3 drops every two or three hours is sufficient; and as soon as the pulse is reduced, it must be lessened, and the intervals prolonged.

VIBURNUM OPULUS—HIGH CRANBERRY.

This shrub grows from three to ten feet high, having smooth, gray, spreading branches. Its leaves are three to five inches in diameter, the lobe often somewhat falcate, nearly smooth above, sparsely hairy underneath, with a petiole about an inch long, with four to six glands on the upper part; stipular appendages one to two pairs at or near the base of the petiole, subulate, often lipped with a gland; the cyme is three to four inches in diameter; the sterile flowers sometimes few, then in other instances many, nearly an inch in diameter; calyx teeth nearly obsolete; drupes nearly half an inch long, juicy, intensely acid and slightly bitter, translucent when dry. The bark of this plant contains valerianic acid, giving the tincture the odor of that acid.

Medical Uses.—The physician who discovered the power and the properties of this shrub is a public benefactor, and the females

of the United States ought to erect a monument to his memory, for it is one of those heaven-sent balms for some of their keenest pangs. It is a very positive remedy for painful menstruation. It was used by the aborigines, and from them the whites learned its use, as they did many of our most positive remedies. It has been in successful use among the people, as a domestic remedy, for a century, in painful affections of women. It seems to produce its specific effects in small or larger doses. It is often cultivated in yards, under the name of the Gueldre's rose, or snow-ball, but its cultivation has entirely changed it, and the wild plant is only used as a medicine—the wild plant, known by the name of "Cramp Bark," from its specific antispasmodic virtues. The bark of the root is the best part for medical purposes. When made of the fresh bark the tincture has a dark-red color, and the odor of valerianic acid or valerian. I have used this tincture and the fluid extract in a great many cases of spasmodic dysmenorrhœa, and have never used any other remedy that acts so positive as this in that affection. I use the saturated tincture (as no other tincture is reliable), made by adding 8 ozs. of the bark to a pint of alcohol; in doses of 15 to 30 gtts., every hour while the spasmodic pains are severe, during the menstrual flow, and about 30 or 40 drops, three times a day, in the interval; and thus used, I have cured this painful affliction of the female with a certainty that is perfectly enrapturing to them and very delightful to me. I would not be willing to treat a case of spasmodic dysmenorrhœa without it. In those peculiar constitutions, where pregnancy is attended with frequent attacks of spasmodic cramps, called false pains, which tortures the woman no little until it can be relieved, this remedy will relieve this condition readily. It is of great value in post-partum pains, in which it should be given after each pain, in doses of 30 to 40 drops. It is also a valuable remedy in cramps of the limbs, which many women suffer with while in the pregnant state: 10 or 15 drops, or even 20 or 30 drops may be given three times a day. It aids to prevent miscarriage or abortion in cases where the woman is subject to that accident at certain periods. I often use it, combined with *helonias dioica*, *mitchella repens*, blue cohosh (*caulophyllum*) and *cemicifuga*, in the form of a compound sirup, made of an ounce of each of the above tinctures to 8 ozs. of simple sirup; dose from 1 to 2 drachms, three times a day. This combination is also one of the best remedies known for protracted labors, or excessively painful labors. It gives tone to the muscular system of the female, prevents any tendency to cramps, and thus assists the expulsive power of the uterus to expel its contents. I have often used this compound in feeble women, who were generally two or three days in labor, and suffered a great deal on previous occasions; but invariably it produced the happy effect upon the uterus, and caused it to expel its contents in due time—frequently in three or four hours. I visited a lady, quite delicate and feeble, a few

days ago, who was lingering with some slight contraction of the uterus, so slight that she did not know whether it was labor or not. I gave her 30 drops of the viburnum opulus tincture, and the fœtus was expelled in some twenty to thirty minutes. The above compound should be given for one or two months before the full term of gestation; then it will not fail, where there is no malformation, to facilitate parturition—at least it never has in my hands. I know ladies, who have tried it, that would not be without it. I have shipped it to some of them seventy-five or one hundred miles. The dose of the tincture is from 20 to 40 drops, three time a day.

THANTHOXYLUM FRAXINEUM—PRICKLY ASH-TOOTH-ACHE TREE.

This is a shrub from ten to fifteen feet in height, with alternate branches, which are armed with strong, conical, brown prickles or thorns, having a broad base, scattered irregularly, though frequently in pairs, at the base of the young branches. Its leaves are alternate and pennate; the leaflets are about five pairs, with an odd one, nearly sessile, ovate, acute, with slight sessicular serratures, somewhat downy underneath. The common petiole is round, usually prickly on the back, and sometimes unarmed. The flowers are small, dense, sessile umbels, near the origin of the young branches; they are of a greenish-color, dæcious, or polygamous, appear before the leaves, and are rather aromatic in odor. The *thanthoxylum carolinianum* is another indigenous species, found only in the Southern States, and grows much larger, attaining the height of forty or fifty feet, and having a diameter of ten or twelve inches. They may be similar in property.

Medical Uses.—One of the best preparations of this shrub for medical uses is the saturated tincture or fluid extract, made from the ripe berries and the bark, equal parts. The dose may vary from 20 to 60 drops, according to the use designed and the effect desired. The Indians used it a great deal, and they called it hantola. They used it for cramp colic, gonorrhœa, syphilis, rheumatism, pains toothache and for ulcers. And it has been used in domestic practice for the above affections with apparent success. Dr. Staples seems to have been the first regular physician that used it; but it seems not to have attracted much attention from the general profession. Rafinesque, a noted botanist, thought that this shrub resembled, in action, mezereum and guaiacum, and he estimated it very highly in chronic rheumatism. King regards it tonic, stimulant, sialagogue and alterative. He says: "The berries are stimulant, carminative and antispasmodic, acting especially upon mucous tissues." The *thanthoxylum*, the extract, is a very diffusible stimulant, in doses of 1 or 2 grains. It acts upon the general system much like ammonia. It stimulates the nerves of motion and sensation, and produces an impression

similar to a gentle shock of electricity. It has been used with good effect in some cases of paralysis. Topically applied, it favorably impresses the mucous surface; the berries seem to have a special affinity for the mucous tissues. It excites the glandular system, especially the glands of excretion. In small doses, it is useful in torpid conditions of the nervous system. I have used it in the low stages of typhoid fever, to stimulate the torpid functions to activity, and have found it to increase the powers of digestion, assimilation and elimination, and, as such, to be very useful. The tincture of the berries is useful in spasms of the bowels, flatulency, diarrhœa and tympanitic distension of the bowels in any disease. It was used with good effect in epidemic cholera, in Cincinnati, several years ago, in doses of a teaspoonful of the tincture of the berries every ten or fifteen minutes, with an injection of $\frac{1}{2}$ fluid ounce with 20 drops of laudanum after each discharge from the bowels. This course saved many valuable lives. In dysentery, after the fever is subdued, and there remains intense spasmodic tenesmus, tympanites, prostration, numbness, and jactitation, etc., the thanthoxylum may be given with the best effects, as it will relieve the above symptoms readily, if given in doses of 5 to 10 drops of the tincture of the berries every hour or two, and an infusion of the berries used as an enema after each discharge from the bowels. Thanthoxylum has also an affinity for the sexual organs of females. It has been known to produce the menses before the regular time, and often to bring it on when it had been suspended from cold. It is a very positive remedy also for spasmodic dysmenorrhœa, in which disease 10 to 15 drops may be given every hour or two until the pain is relieved. It is also a remedy for amenorrhœa. It has proven very successful in several cases of leucorrhœa, in females of nervous temperament and rather phlegmatic habits. It is also very prompt to relieve after-pains in obstetric practice. In all cases of dysmenorrhœa, where the neuralgic element predominates, it will give relief. It may be alternated with viburnum or iodoform. In chlorotic emenorrhœa, even of long standing, this remedy will be found to act with great promptitude. In such cases, it is best alternated with iron and helonias dioica. It has been used with success in sciatica and crural neuralgia. The dose is from 5 to 60 drops, according to what purpose it is given.

VIBURNUM PRUNIFOLIUM—BLACK HAW.

This shrub is indigenous to the United States, and grows in many parts of the Southern States, near streams, in woods, thickets and along hedges; flowering in May and June; ripening its fruit in September and October, which is edible. It grows from eight to fifteen feet high, with numerous spreading branches and short lateral spines or spurs. The leaves are usually from one to two inches long and rounded—smooth on both sides; petioles about

half an inch long ; cymes are about three inches in diameter, terminating the short, lateral branches or spurs ; the primary divisions usually about four ; the fruit is about one-third of an inch long, of a bluish-black color and slightly glaucous when mature, the nucleus compressed.

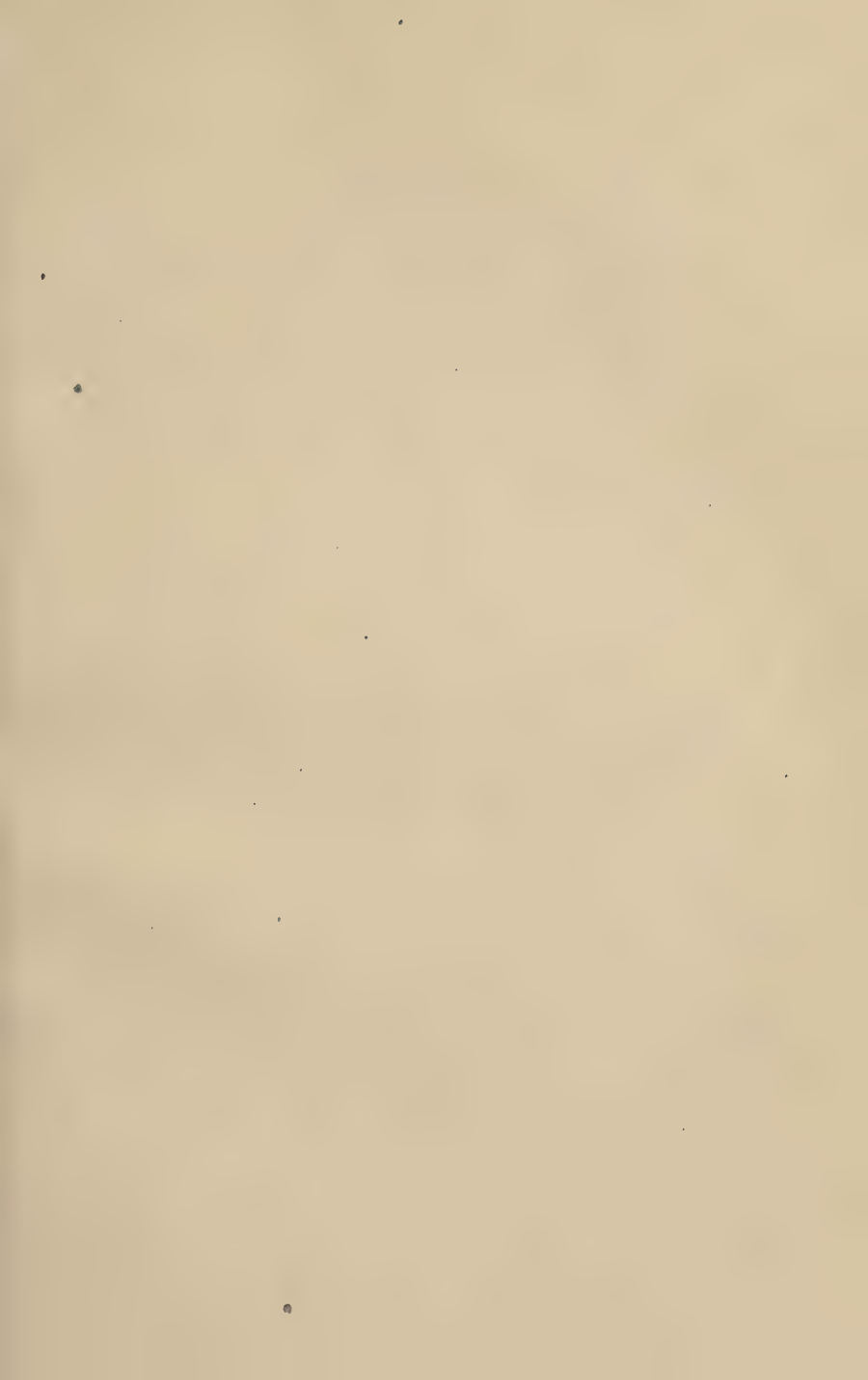
Medical Uses.—This species possesses some of the properties of the *viburnum opulus*, but it is thought not to be identical. It evidently contains a large per cent. of valerianic acid, as the tincture and fluid extract have the peculiar odor of valerian. It has been used locally for cancer of the tongue with reported success. As a remedy in dysmenorrhœa, and spasmodic pains of that organ, it seems to act equally as forcibly as the cramp-bark. But as a remedy in threatened abortion or miscarriage, it is superior to the cramp-bark. Dr. Phares, of Alabama, who has used it extensively, calls it nervine, antispasmodic, tonic, astringent and diuretic. He states that it may be used to good purpose in urinary diseases, ophthalmia, aphthous sore-mouth, chronic diarrhœa, indolent ulcers and the latter stage of dysentery. It has a fine effect in colic, cramp, palpitation, and other affections incident to the pregnant state, or those consequent upon the diseased condition of the uterus. But its special value is in preventing abortion or miscarriage, whether habitual or from an injury. It even counteracts the effects of criminal drugging, if used in time in sufficient doses ; for which purpose, I give a teaspoonful of the fluid extract, or two teaspoonfuls of the saturated tincture of the bark of the root every twenty or thirty minutes, until it arrests the labor. It has frequently been known to neutralize the effects of cotton-root bark, where that article had been taken for criminal purposes. I have just arrested labor in a case where the lady took dysentery about the sixth or seventh month, and the violent torminor and tenesmus produced violent labor pains, and the lady was first treated, by another physician, with large doses of opium ; but, while it produced profound narcosis, it failed to arrest the labor pains. I gave her 1 drachm of the fluid extract of the *viburnum prunifolium*, and it arrested the labor at once ; and the lady had no further signs of it afterward, though the flux was severe for several days. I have used it in several well-marked cases of threatened abortion and miscarriage, and always with perfect success. It is also a valuable remedy for painful menstruation, perhaps as potent as the *viburnum opulus*. I use the fluid extract in doses of 60 drops, or the saturated tincture in doses of 1 or 2 teaspoonfuls.

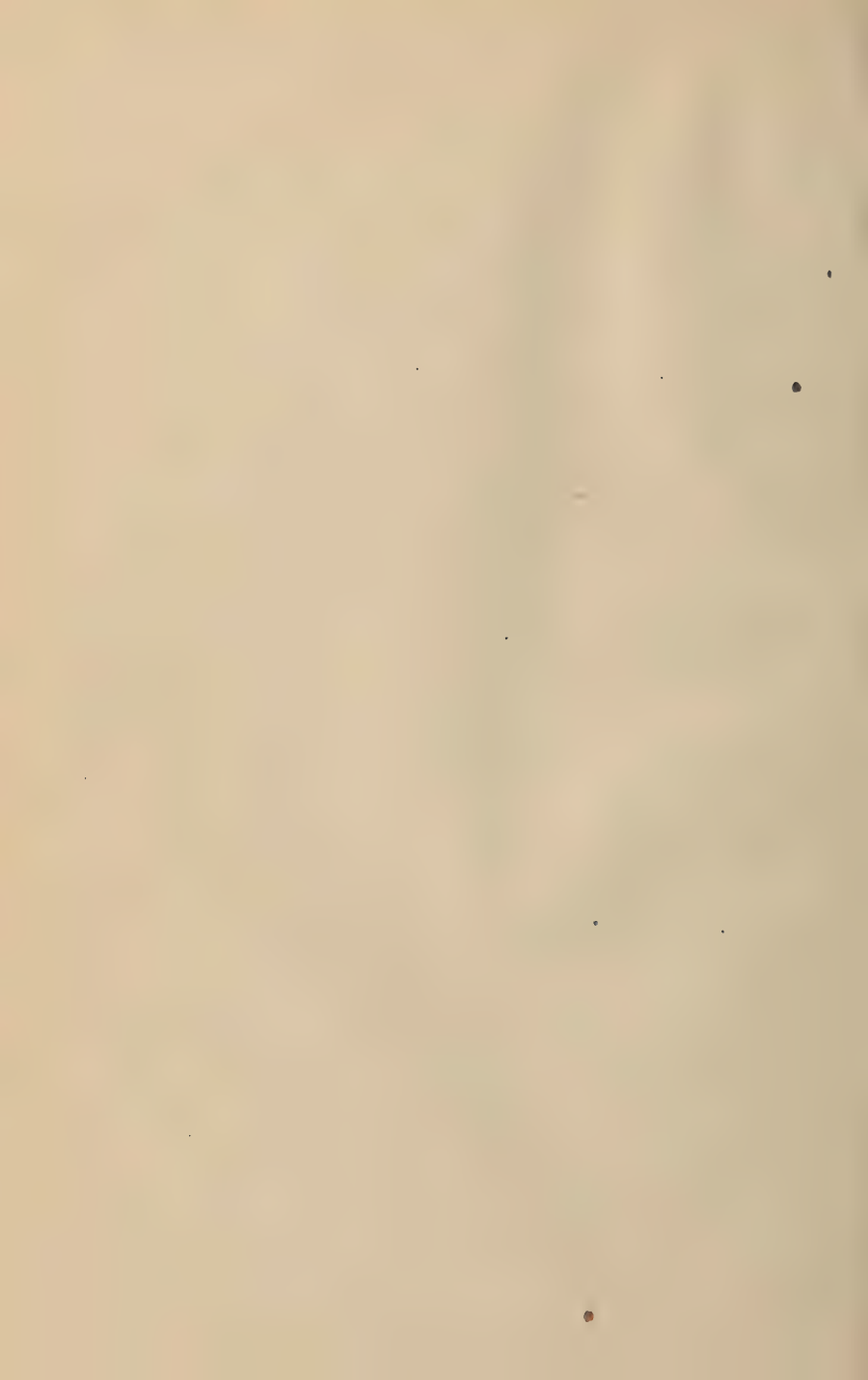
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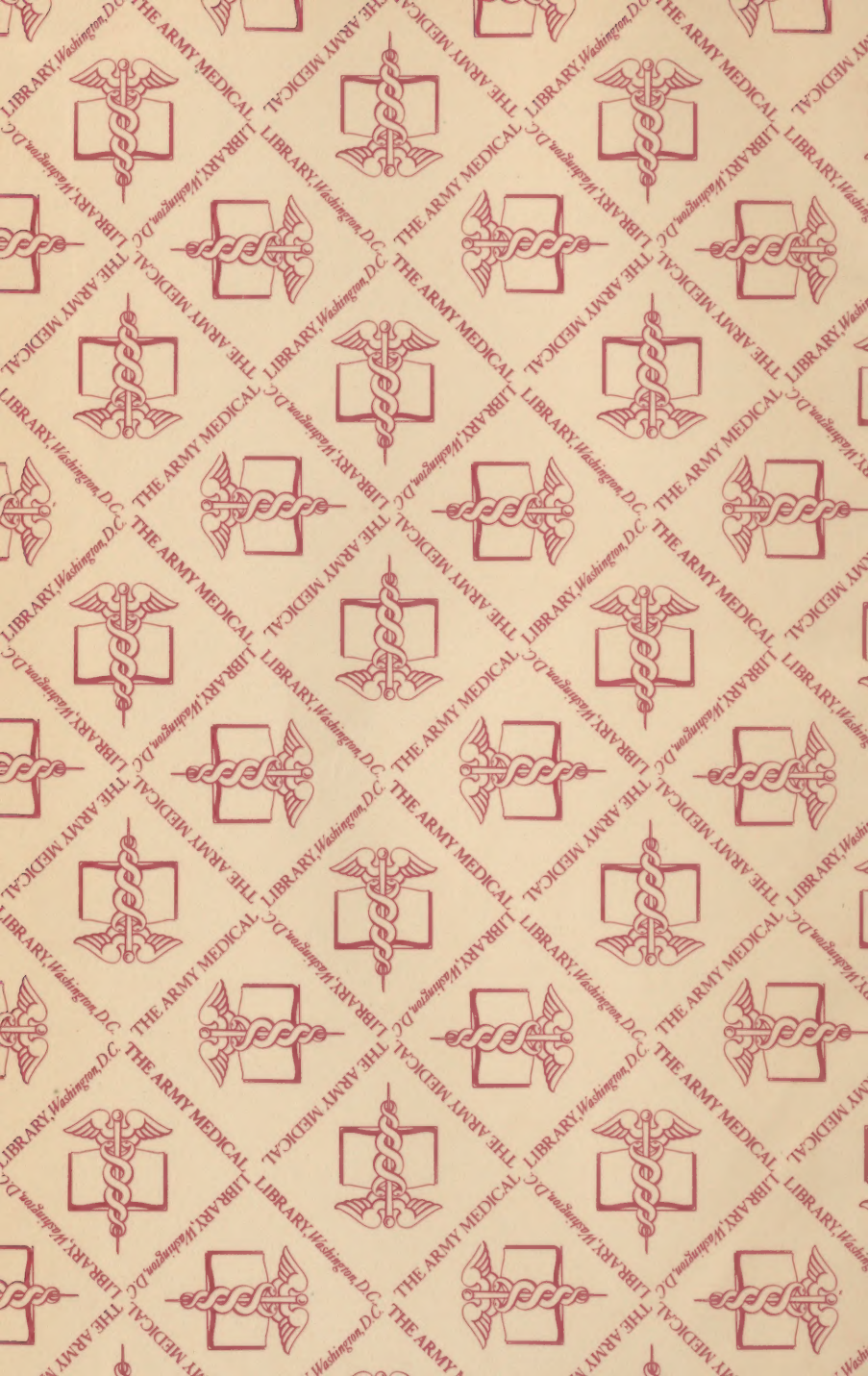
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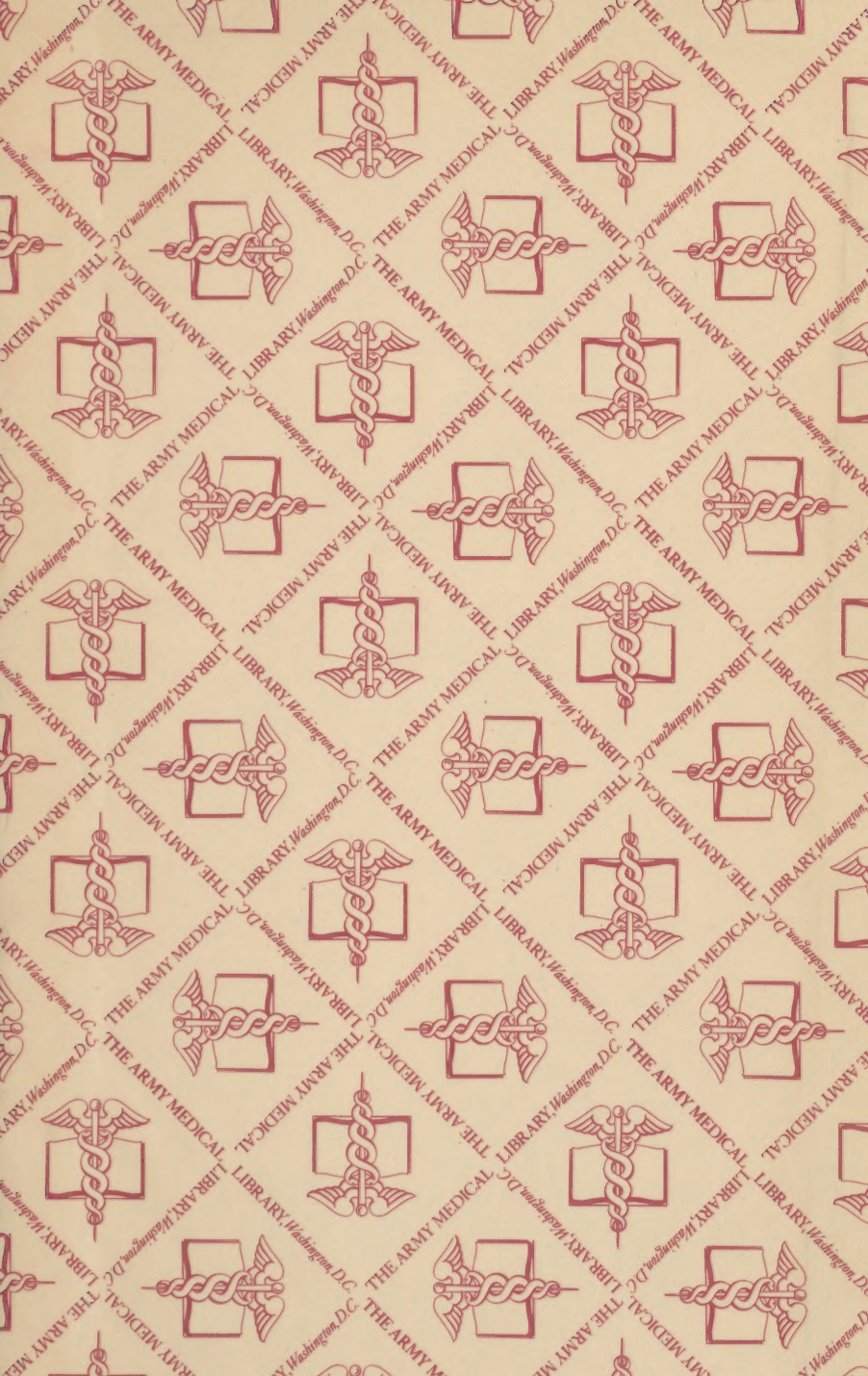
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ST. LOUIS:

CHAS. E. WARE & Co., PRINTERS, FIFTH AND CHESTNUT STREETS.

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